NATURAL LANDSCAPES OF NOVA SCOTIA:
Summary Descriptions

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NATURAL LANDSCAPES OF NOVA SCOTIA

Nova Scotia's rich landscape diversity is the result of its geographic position (a peninsula jutting into the North Atlantic Ocean at mid-latitude) and its complex geological and glacial history. Despite Nova Scotia's relatively small size (5.5 million hectares), nine major climatic regions have been identified, 47 geologic formations have been mapped (ranging from soft limestone to resistant granites), and 84 major soil types have been listed.

Nova Scotia supports a complex mosaic of diverse flora and fauna. There are at least 6,000 species of plants and animals, ranging from northern boreal to southern Canadian and Alleghenian species, and from coastal plain to arctic-alpine species. To date, over 20,000 species of invertebrates have been identified. While species inventories are incomplete, scientists estimate that the number of vertebrates, invertebrates, and plants in Nova Scotia may approach 40,000. As well, there are many thousands of species of microorganisms. These species have not been systematically inventoried and their numbers, although large, are essentially unknown.

What are Natural Landscapes?

In the broadest sense, a landscape is simply an expansive area viewed from a particular point or perspective. Historically, landscape has been considered as an artistic or aesthetic concept, associated with landscape painting, photography and scenic viewing. Today, the idea of landscape reflects a new insight into an old concept. Landscapes are now conceived as recognizable areas or units of land that can be delineated on maps or aerial photographs and characterized by science-based description.

The modern scientific approach views a landscape as being a mosaic of different but interacting ecosystems that are repeated in a similar pattern to form a distinct and definable land unit or area. A landscape is characterized by distinctive local environmental and biotic factors or elements (i.e., the local variety and distribution of landforms and vegetation communities, local climate, and local natural disturbance regime). In general, landscapes vary in size from several to many square kilometres.

The identification and mapping of Nova Scotia's natural landscapes is based on the descriptive framework provided by the Natural History of Nova Scotia (Simmons et.al., 1984), published jointly by the Department of Lands and Forests (now Natural Resources) and the Department of Education. This is a hierarchical, ecologically based classification that describes the evolution of Nova Scotia's existing land base. The lowest or most detailed level of the hierarchical scheme - the theme unit - is similar in concept and scale to the definition of a landscape given above.

Infrared aerial photographs (scale: one inch to one mile) and updated geologic and geomorphologic information were used to refine or redefine theme unit boundaries to more accurately delineate natural landscapes based on the distributions of their component ecosystems. In all, 80 distinct landscape types were identified and delineated (see Figure 1 : **Natural Landscapes of Nova Scotia** map). This landscape list is provisional and may change as new information becomes available.

Figures 2, 3 and 4 depict the range of landscape types encountered along north-south transects

across western and central Nova Scotia, and across Cape Breton[1].

What are Landscape Ecosystems?

A landscape is comprised of a characteristic set of ecosystems that differ from those of neighbouring landscapes. Species tend to gather into natural communities as a result of competing for or sharing needed resources. Similarly, natural communities, held together by common physical conditions (e.g., soil moisture, aspect, etc.), can be grouped as ecosystems.

Although the ecosystem concept has been with us for nearly a century, it is a difficult one to grasp. This is because the ecosystem can be identified at various levels or scales, depending on the user's interest or purpose. The biogeographer might consider the prairies of central North America as an ecosystem, whereas a microbiologist might use the same term in reference to a rotting log in a forest stand. Whatever the scale, the ecosystem concept is based on the fundamental idea that there is a symbiotic relationship between living organisms and their physical setting. In other words, an ecosystem includes all the biotic (living) and abiotic (non-living) components as well as the interactions that link these components together.

In the context of Nova Scotia, a landscape ecosystem has been defined as follows: "A landscape ecosystem is a group of biotic communities, together with their environment, occurring over a particular portion over the landscape and held together by some common physical or biotic feature. Ecosystems contain climax and related successional communities within them and, as an assemblage, form distinct broad landscapes. These landscape ecosystems must be mappable at the 1:63,000 scale, using infra-red air photographs.

We can best understand and describe the variety of and variability among all life forms when we look at ecosystems at the local level. Landforms influence local climate and soil processes, which in turn control the presence or absence and the distribution of organisms.

Some characteristic features of a landscape ecosystem include distinctly shaped landforms, plant communities that normally are associated with the landform and that follow particular successional trends over time leading to a climax forest community, microclimate, and a distinct energy/matter pathway (e.g., nutrient cycle, hydrologic cycle).

Landscape Descriptions

Draft landscape descriptions for each of Nova Scotia's 80 landscapes follow, including their

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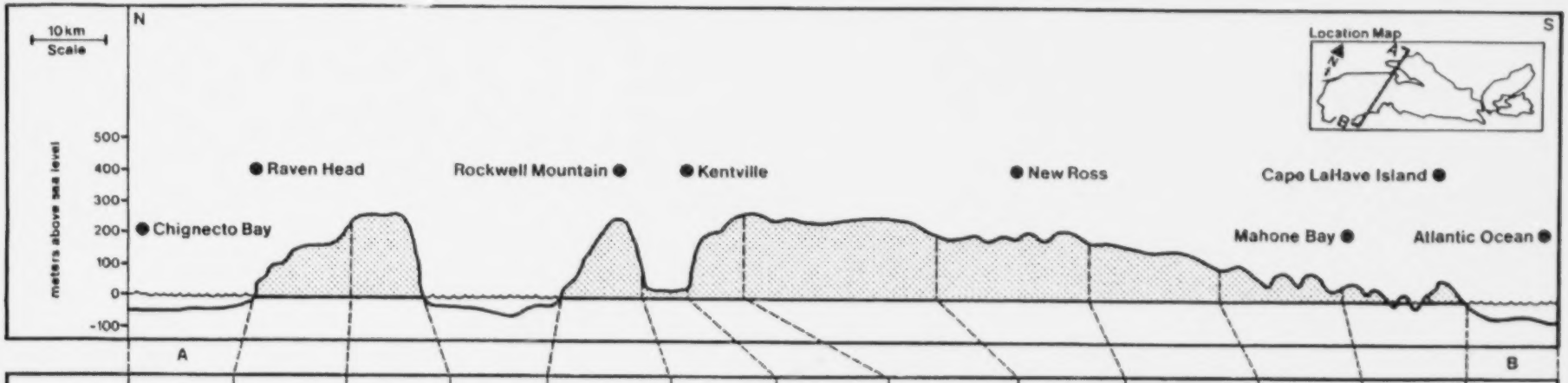
[1] Tree species are abbreviated in these and other figures throughout the text as follows: sM = sugar maple, rM = red maple, wB = white birch, yB = yellow birch, Be = American beech, rO = red oak, pc = pin cherry, bP = balsam poplar, lA = large-toothed aspen, tA = trembling aspen, aE = American elm, wA = white ash, StM = striped maple, MtA = mountain ash, jP = jack pine, wP = white pine, rP = red pine, bF = balsam fir, eH = eastern hemlock, La = larch, rS = red spruce, bS = black spruce, wS = white spruce, Sp = spruce.

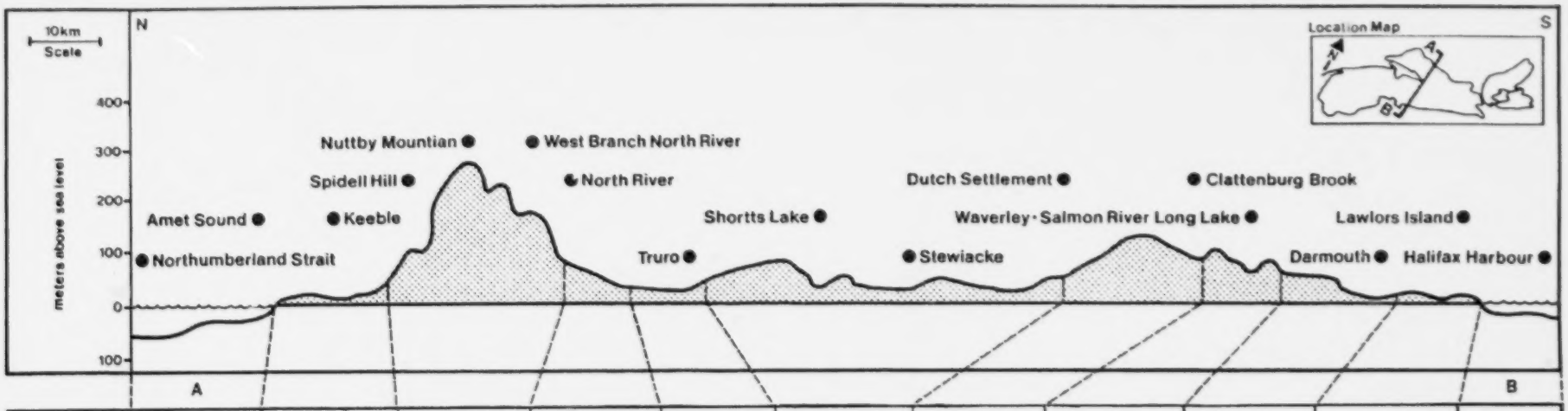
respective abiotic characteristics and dominant ecosystems. Information regarding bedrock geology, surficial geology, soils and hydrology are derived from 1:500,000 and 1:450,000 scale maps of Nova Scotia (NSDNR, 1979; NSDNR, 1992; MacDougall and Nowland, 1972; and NSDNR, 1996; respectively), which were overlain by natural landscape boundaries. Landforms have been characterized by analysis of air photos and topographic maps, and preliminary coastal environment descriptions are derived from Owen and Bowen (1977) and personal observation. Descriptions of dominant landscape ecosystems of each landscape, including landforms, vegetation and natural disturbance regimes, are based on air photography, personal observations and interpretations, and some historical data. Numerous figures throughout the text help illustrate the variety and distribution of ecosystems within their respective landscapes.



NATURAL LANDSCAPE	CHIGNECTO BAY	CHIGNECTO RIDGED PLAIN	CHIGNECTO SLOPES	MINAS CHANNEL	NORTH MOUNTAIN RIDGE	ANNAPOLIS VALLEY	SOUTH MOUNTAIN FOOTHILLS	SOUTH MOUNTAIN ROLLING PLAIN	LAHAVE DRUMLINS	SOUTH MOUNTAIN ROLLING PLAIN	LAHAVE DRUMLINS	MAHONE BAY ISLANDS	ATLANTIC OCEAN
CLIMATE	cold winters; short, cool summer, coastal fog	cold, wet winter; warm moist summer	cold, wet winter; cool/ warm, moist summer	cold winter, short, cool summer, foggy	cold, moist winter; cool, moist summer, foggy	cold, moist winter; hot, dry summer	cold, moist winter; hot, dry summer	cold, moist winter; warm/hot dry summer	cold, moist winter; warm/hot dry summer	cold, moist winter; warm/hot dry summer	cold, moist winter; warm/hot dry summer	cool, wet winter; cool, wet summer, foggy, windy	mild winter, short cool summer, foggy
BEDROCK GEOLOGY	Carboni-ferous sedimentary rocks	Carboniferous sandstone	Complex & variable, primarily Carboniferous clastic sedimentary rocks	Triassic clastic sedimentary rocks	Triassic/Jurassic basalt	Triassic clastic sedimentary rocks	1) Cambrian/ Ordovician slate 2) Carboniferous sandstone 3) other	1) Devono-Carboniferous granite 2) Cambrian/ Ordovician slate & greywacke	1) Cambrian/ Ordovician slate, greywacke 2) Devono-Carboniferous granite	1) Devono-Carboniferous granite 2) Cambrian/ Ordovician slate & greywacke	1) Cambrian/ Ordovician slate, greywacke 2) Devono-Carboniferous granite	1) Cambrian/ Ordovician slate, greywacke 2) others	Cambrian/ Ordovician slate & greywacke
PHYSIO-GRAPHY	bay	elevated, wide coastal plain	rolling hills upland	bay	ridge-like upland	broad, long valley	northwest facing foothills	complex, undulating plain	drumlin field	complex, undulating plain	drumlin field	drumlin coast	ocean
SURFICIAL MATERIAL	1) glacial material 2) marine sediments	1) silty till 2) stony till 3) scoured bedrock 4) ground moraine	1) silty till 2) stony till 3) colluvium 4) residuum 5) glaciofluvial deposits	1) glacial material 2) marine sediments	1) stony till 2) scoured bedrock 3) silty till	1) glaciofluvial deposits 2) silty till 3) glaciolacustrine deposits	1) silty till 2) stony till 3) glaciofluvial deposits	1) stony till 2) silty till 3) ground moraine 4) scoured bedrock	1) stony till 2) drumlins 3) silty till 4) scoured bedrock	1) stony till 2) silty till 3) ground moraine 4) scoured bedrock	1) stony till 2) drumlins 3) silty till 4) scoured bedrock	1) stony till 2) drumlins	1) glacial till & moraine 2) reworked sediments
DOMINANT ECOSYSTEMS	marine	1) well drained coniferous dominated (rS+sM,yB) rolling terrain; 2) imperfectly drained coniferous (rS,bS) undulating terrain	1) well drained coniferous dominated (rS+yB) rolling terrain; 2) well drained coniferous (rS) canyons	marine	1) well drained mixwood (rS, yB,bF) rolling terrain; 2) well drained deciduous dominated (sM,yB,Be,rS) slopes	1) well drained coniferous (rS,eH,wP, rP) undulating terrain; 2) well drained mixwood (sM Be,rS,eH) undulating terrain	1) well drained mixwood (sM,Be,rS,eH) slopes	1) well drained coniferous (rS,wP,eH+rO) undulating terrain; 2) poorly drained coniferous (bS,La) flats	1) well drained deciduous dominated (sM,yB,Be+ rS,eH,wP,rP) drumlins; 2) well drained coniferous (rS,eH,wP) undulating terrain	1) well drained coniferous (rS,wP,eH+rO) undulating terrain; 2) poorly drained coniferous (bS,La) flats	1) well drained deciduous dominated (sM,yB,Be+ rS,eH,wP,rP) drumlins; 2) well drained coniferous (rS,eH,wP) undulating terrain	1) well drained coniferous (wS, bF+bS) undulating terrain; 2) well drained deciduous dominated (sM,yB,Be+ rS,eH,wP) drumlins	marine

Figure 2

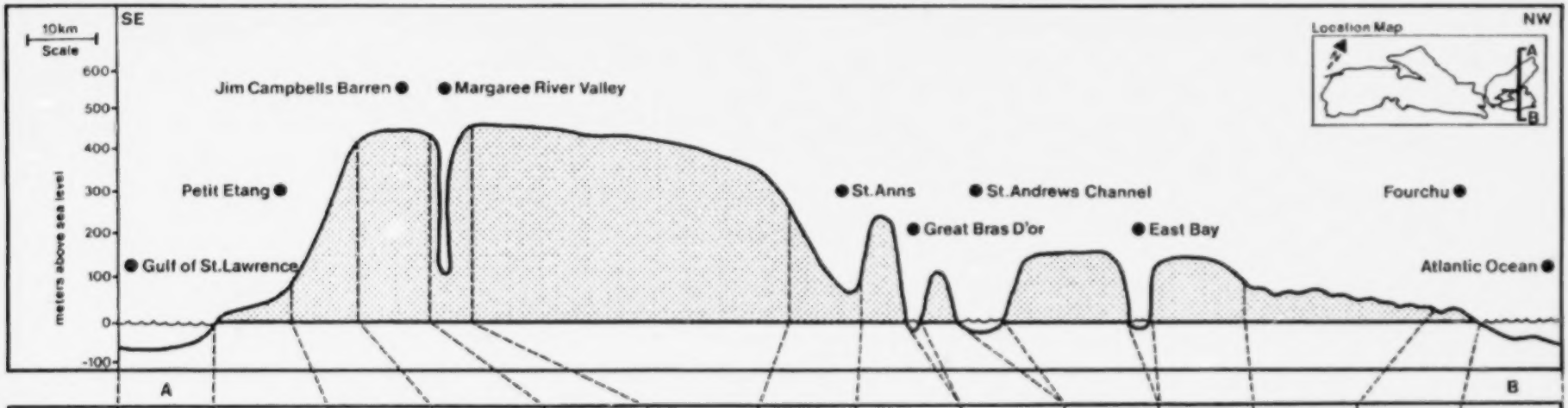
Cross-Section of Natural Landscapes across Western Nova Scotia



NATURAL LANDSCAPE	NORTHUMBER-LAND STRAIT	NORTHUMBER-LAND STRAIT PLAIN	COBEQUID MOUNTAIN	SOUTH COBEQUID FOOTHILLS	COBEQUID TIDAL BAY	SHUBENACADIE RIVER ROLLING HILLS	CENTRAL QUARTZITE HILLS & PLAINS	EASTERN SHORE GRANITE RIDGE	CENTRAL QUARTZITE HILLS & PLAINS	EASTERN SHORE BEACHES	ATLANTIC OCEAN
CLIMATE	cold, moist winter; warm dry summer	cold moist winter; warm dry summer	cold wet winter; cool/warm moist summer	cold moist winter; warm moist summer	cold moist winter; warm dry summer	cold moist winter; warm moist summer	cold moist winter; warm /hot dry summer	cold moist winter; warm/hot dry summer	cold moist winter; warm/hot dry summer	cool wet winter; cool wet summer; foggy, windy	cool wet winter; cool wet summer; foggy; windy
BEDROCK GEOLOGY	Carboniferous sandstone	Carboniferous sandstone	Hadrynian to Devonian complex of meta-volcanic & meta-sedimentary rocks	1) Carboniferous sandstone 2) Triassic clastic sedimentary rocks	Triassic clastic sedimentary rocks	Carboniferous: 1) sandstone 2) other clastic sedimentary rocks; and 3) carbonates	Cambrian/ Ordovician: 1) greywacke (quartzite) 2) slate	Devono-Carboniferous granite	Cambrian/ Ordovician: 1) greywacke (quartzite) 2) slate	Cambrian/ Ordovician: 1) greywacke (quartzite) 2) slate	Cambrian/ Ordovician: 1) greywacke (quartzite) 2) slate
PHYSIO-GRAPHY	sheltered ocean	wide coastal plain	linear, smooth topped & hilly upland	south facing foothills	narrow coastal plain	rolling hills	low hills, rolling terrain & flats	rough, parallel ridges	low hills, rolling terrain & flats	beaches, drumlin headlands, estuaries	large harbour
SURFICIAL MATERIAL	1) glacial material 2) marine sediments	1) silty till 2) hummocky ground moraine	1) glacially scoured bedrock 2) silty till 3) stony till	1) silty till 2) hummocky ground moraine	1) silty till 2) hummocky ground moraine 3) glaciofluvial deposits	1) silty till	1) stony till 2) silty till 3) glacially scoured bedrock	1) stony till 2) glacially scoured bedrock	1) stony till 2) silty till 3) glacially scoured bedrock	1) stony till 2) drumlins	1) glacial material 2) marine sediments
DOMINANT ECOSYSTEMS	marine	1) imperfectly drained coniferous (rS,bF,wS) undulating terrain; 2) poorly drained coniferous (bS,La) flats	1) well drained deciduous (sM,yB,Be) hills; 2) well drained coniferous (rS) undulating terrain	1) well drained deciduous dominated (sM, yB,Be,rS+eH) mixwood hills	1) well drained coniferous (rS) undulating terrain; 2) imperfectly drained coniferous (rS,bS) flats	1) well drained mixwood & mixed forest (rS,sM, yB,Be+eH) hills; 2) imperfectly drained conifer-ous (rS,bS+wP, eH) undulating terrain	1) well drained deciduous (sM, yB,Be) hills; 2) well drained coniferous (rS, wP+eH) rolling terrain	1) well drained coniferous (rS,wP+sM,yB) ridges; 2) lakes	1) well drained deciduous (sM, yB,Be) hills; 2) well drained coniferous (rS, wP+eH) rolling terrain	1) well drained coniferous (wS,bS,bF) undulating terrain; 2) saltmarsh	marine

Figure 3

Cross - Section of Natural Landscapes across Central Nova Scotia



NATURAL LANDSCAPE	GULF OF ST LAWRENCE	WESTERN CAPE BRETON COASTAL PLAIN	WESTERN COAST STEEP SLOPES	CAPE BRETON BOREAL PLATEAU	INTERIOR STEEP SLOPES	CAPE BRETON BOREAL PLATEAU	CENTRAL CAPE BRETON HILLS	KELLYS MOUNTAIN	SYDNEY PLAIN	BOISDALE HILLS	BRAS D'OR FAULT RIDGES	MIRA RIVER DRUMLIN PLAIN	FOURCHU TILL CLIFFS AND BEACHES	ATLANTIC OCEAN
CLIMATE	cold wet winter, warm moist summer	cold wet winter, warm moist summer	cold wet winter, cool moist summer	cold wet winter, cool wet summer, windy	cold wet winter, warm moist summer	cold wet winter cool wet summer, windy	cold moist winter, warm moist summer	cold wet winter, cool moist summer	cold moist winter, warm moist summer	cold moist winter, cool/ warm moist summer	cold moist winter, cool/ warm moist summer	cool wet winter, cool wet summer, foggy, windy	cold wet winters, cool wet summers, foggy, windy	mid winters, short, cool summers, foggy
BEDROCK GEOLOGY	sedimentary rocks, including 1) mudstone 2) sandstone 3) limestone	Carboniferous sedimentary rocks, including 1) mudstone 2) sandstone 3) limestone	Proterozoic 1) meta-volcanic rocks 2) meta-sedimentary rocks & 3) plutonic rocks	Proterozoic complex of 1) meta-volcanic & meta-sedimentary rocks, 2) plutonic rocks	1) Proterozoic complex of meta-volcanic meta-sedimentary & plutonic rocks, 2) Carboniferous sedimentary rocks	Proterozoic complex of 1) meta-volcanic & meta-sedimentary rocks, 2) plutonic rocks	Carboniferous sedimentary rocks, incl limestone, gypsum	1) Hadrynian/ Cambrian granitoid rocks 2) Proterozoic meta-volcanic & meta-sedimentary rocks 3) Carboniferous sedimentary rocks	Carboniferous sedimentary rocks, including 1) coal-bearing sandstone 2) limestone	Proterozoic to Cambrian complex of volcanic meta-volcanic meta-sedimentary & granitoid rocks	1) Hadrynian volcanic and meta-sedimentary rocks, 2) Hadrynian granitoid rocks	1) Hadrynian volcanic & meta-sedimentary rocks 2) Hadrynian granitoid rocks 3) Cambrian & Carboniferous sedimentary rocks	Hadrynian 1) volcanic & meta-sedimentary rocks 2) granitoid rocks	1) Hadrynian volcanic & meta-sedimentary rocks, 2) younger strata offshore
PHYSIO-GRAPHY	gulf	narrow coastal plain	steep slopes, river canyons	undulating highland plateau	steep slopes & river canyons	undulating highland plateau	rolling hills	ridge like upland	flat coastal plain	rolling hills	ridge like upland	drumlin plain	cliffed coastal plain	ocean
SURFICIAL MATERIAL	1) glacial material 2) reworked sediments	1) glaciofluvial deposits 2) silty till 3) stony till	1) colluvium 2) glaciofluvial & alluvial deposits	1) residuum 2) scoured bedrock 3) stony till	1) colluvium	1) residuum 2) scoured bedrock 3) stony till	1) silty till 2) stony till 3) glacially scoured bedrock	1) scoured bedrock 2) colluvium 3) silty till	1) stony till 2) silty till 3) glacially scoured bedrock	1) glacially scoured bedrock 2) stony till	1) glacially scoured bedrock 2) stony till	1) stony till 2) drumlins 3) silty till	1) stony till 2) drumlins 3) scoured bedrock	1) glacial material 2) reworked sediments
DOMINANT ECOSYSTEMS	marine	1) well drained mixwood (sM yB wS bF) undulating terrain 2) imperfectly drained coniferous (wS bS bF La) undulating terrain	1) well drained deciduous dominated (sM yB Be wB bF) slopes 2) well drained deciduous dominated (sM yB Be wS bF) canyons	1) well drained coniferous (bF) undulating terrain	1) well drained deciduous (sM yB Be) slopes 2) well drained mixed forest (sM yB Be bF wB) canyons	1) well drained coniferous (bF) undulating terrain	1) well drained deciduous dominated (sM yB Be+ wS wP) hills 2) imperfectly drained coniferous (wS bS bF) undulating terrain	1) well drained deciduous dominated (sM yB Be) slopes 2) well drained coniferous (bF) undulating terrain	1) imperfectly drained coniferous (wS bS bF La) flats, 2) well drained coniferous dominated (wS bS bF+ sM yB Be wP en) undulating terrain	1) well drained deciduous (sM yB Be) slopes 2) imperfectly drained coniferous (wS bF) undulating terrain	1) well drained coniferous (bF + wS) undulating terrain, 2) well drained deciduous dominated (sM yB Be+ wS bF) drumlins	1) well drained coniferous (wS bF) undulating terrain 2) well drained deciduous dominated (sM yB Be+ wS bF) drumlins	1) imperfectly drained coniferous (wS bF bS) flats, 2) beaches	marine

Figure 4

Cross - Section of Natural Landscapes across Cape Breton

Landscape 1 - North Mountain Ridge

This linear ridge-like 102,844 hectare upland landscape is characterized by Acadian mixwood forest types on predominantly rolling terrain and slopes. Drainage is mainly parallel and the coast is dominated by cliffs, up to 30 m or more, with narrow cobble beaches.

Bedrock:

Major:	Triassic/Jurassic basalt	95%
Minor:	Late Triassic silts tone, along with southern margin	5%

Surficial Materials:

Major	Stony till	50%
	Glacially scoured bedrock	25%
Minor	Silty till	20%
	Other	5%

Soils:

Major	Cobequid (W)	80%
Minor	Queens (I)	10%
	Morristown (W)	10%

Hydrology:

Parallel drainage; streams, generally draining northwest into the Bay of Fundy; few small lakes.

Land Forms

Well drained rolling terrain; well drained slopes.

Coastal Environment:

Low to moderately high basalt cliffs up to 30 m. or more locally; pocket cobble beaches; few, generally small coves and beaches; low rocky coast occurs locally.

Dominant Landscape Ecosystems:

Well drained rolling terrain with red spruce - yellow birch - balsam fir forest with patch natural disturbance regime;
Well drained slopes with sugar maple - yellow birch - American beech - red spruce forest with gap replacement natural disturbance regime.

Landscape 2 - Annapolis Valley

A 90,056 hectare lowland situated near sea level and at least 150 m below surrounding landscapes, and drained to the west and east by two major river systems.

Bedrock:

Major:	Late Triassic conglomerate, sandstone, shale	80%
Minor:	Late Triassic siltstone along northern margin	15%
	Others along southern margin	5%

Surficial Materials:

Major:	Glaciofluvial deposits	50%
	Silty till	40%
Minor:	Glaciolacustrine deposits	10%

Soils:

Major	Canning (R)	40%
Minor:	Tormentine (W)	10%
	Debert (I)	10%
	Morristown (W)	10%
	Queens (I)	10%
	Acadia (I-P)	5%
	Hebert (R)	5%
	Kingsville (P)	5%
	Gibraltar (W)	5%

Hydrology:

Dendritic drainage; major drainage northeast or southwest, confined between North and South Mountains; no lakes.

Landforms:

Well drained undulating terrain.

Coastal Environment:

Low cliffs or slope; pebble-cobble beaches, tidal flats, saltmarsh.

Dominant Landscape Ecosystems:

Well drained red spruce - eastern hemlock - white pine - red pine undulating terrain with infrequent stand initiating natural disturbance regime;
Well drained sugar maple - American beech - red spruce - eastern hemlock undulating terrain with gap natural disturbance regime.

Landscape 3 - South Mountain Foothills

The 50,400 hectare landscape consists of a series of foothills and slopes that form the northeastern margin of South Mountain and support Acadian mix wood forest types. Drainage is rectangular and dendritic and is defined by one moderate-sized river and portions of various smaller streams.

Bedrock:

Major:	Cambrian/Ordovician slate	60%
Minor	Early Carboniferous sandstone	20%
	Others	20%

Surficial Materials:

Major:	Silty till	80%
Minor:	Stony till	10%
	Glaciofluvial deposits	10%

Soils:

Major:	Morristown (W)	65%
Minor:	Wolfville (W)	10%
	Queens (I)	10%
	Gibraltar (W)	5%
	Hebert (R)	5%
	Barney (W)	5%

Hydrology:

Rectangular/dendritic drainage, few small lakes, a major portion of one moderate-sized river and portions of several small streams.

Landforms:

Well drained slopes.

Coastal Environment:

N/A.

Dominant Landscape Ecosystems:

Well drained sugar maple - American beech - red spruce - eastern hemlock slopes with gap natural disturbance regime;
Imperfectly drained red spruce - eastern hemlock hummocky terrain with patch/infrequent stand initiating natural disturbance regime.

Landscape 4 - St. Mary's Bay Cliffs and Beaches

A 22,848 hectare coastal landscape dominated by boreal coastal coniferous forest on flat to undulating terrain, includes the lower reaches of several large rivers and local, coastal drainage. Medium sized lakes are common. The coastal environment consists of low to moderately high cliffs and various types of beaches.

Bedrock:

Major:	Cambrian/Ordovician greywacke	50%
	Cambrian/Ordovician slates	25%
Minor:	Ordovician/Silurian rhyolite	15%
	Ordovician/Silurian quartzite	10%

Surficial Materials:

Major	Stony till with stony till and silty till drumlins	95%
Minor	Hummocky ground moraine	5%

Soils:

Major:	Liverpool (I)	65%
Minor:	Gibraltar (W)	20%
	Hebert (R)	5%
	Barney (W)	5%
	Aspotogan (P)	5%

Hydrology:

Lower reaches of several large rivers; short, internal, dendritic streams common; predominantly medium-sized lakes common.

Landforms:

Imperfectly drained undulating terrain; poorly drained flats.

Coastal Environment:

Till or rock cliffs, 3-30 m, narrow beaches and coarse-sediment barrier beaches common.

Dominant Landscape Ecosystems:

Imperfectly drained white spruce - black spruce - balsam fir undulating terrain with patch/infrequent stand initiating natural disturbance regime;
Poorly drained black spruce flats with infrequent stand initiating natural disturbance regime.

Landscape 5 - Sissiboo Low Hills

This 49,486 hectare landscape consists of a series of low, broad hills and hummocky terrain characterized by Acadian mixed forest. Drainage is dendritic, with middle to lower reaches of few major rivers:

Bedrock:

Major:	Cambrian/Ordovician greywacke	65%
	Cambrian/Ordovician slate	20%
Minor:	Early Devonian shale	10%
	Ordovician/Silurian quartzite	5%

Surficial Materials:

Major:	Silty till	60%
Minor:	Hummocky ground moraine	20%
	Stony till	20%

Soils:

Major:	Liverpool (I)	30%
	Barney (W)	30%
	Gibraltar (W)	25%
Minor:	Wolfville (W)	5%
	Morristown (W)	5%
	Aspotogan (P)	5%

Hydrology:

Middle to lower reaches of few major rivers; dendritic drainage; few medium-sized lakes.

Landforms:

Well drained broad hills; imperfectly drained hummocky terrain.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech broad hills with natural gap disturbance regime;
Imperfectly drained red spruce - eastern hemlock hummocky terrain with patch/infrequent stand initiating natural disturbance regime.

Landscape 6 - Tusket River Drumlins

A 134,234 hectare drumlin field superimposed on undulating terrain and characterized by Acadian mixed forest. Drainage is dendritic and is controlled by the drumlins; medium to large lakes are abundant.

Bedrock:

Major:	Cambrian/Ordovician greywacke	65%
Minor:	Cambrian/Ordovician slate	20%
	Ordovician/Silurian rhyolite	10%
	Others	5%

Surficial Materials:

Major:	Stony till with stony till and silty till drumlins	80%
Minor:	Hummocky ground moraine	20%

Soils:

Major:	Gibraltar (W)	45%
	Liverpool (I)	25%
Minor:	Barney (W)	15%
	Aspotogan (P)	15%

Hydrology:

Headwaters and middle reaches of several major rivers; dendritic drainage; medium to large lakes abundant.

Landforms:

Well drained drumlins; well drained undulating terrain.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech drumlins with gap natural disturbance regime;
Well drained red spruce - eastern hemlock - white pine (red oak) undulating terrain with patch/infrequent stand initiating natural disturbance regime.

Landscape 7 - South Mountain Rolling Plain

As expansive 623,242 hectare southwardly inclined and resistant upland plain characterized by a variety of glacial deposits and dominated by Acadian coniferous forest.

Bedrock:

Major:	Devonian/Carboniferous granites	90%
Minor:	Cambrian/Ordovician slate	5%
	Cambrian/Ordovician greywacke	5%

Surficial Materials:

Major:	Stony till	50%
Minor:	Silty till	20%
	Hummocky ground moraine	20%
	Glacially scoured bedrock	10%

Soils:

Major:	Gibraltar (W)	90%
Minor:	Liverpool (I)	
	Barney (W)	
	Wolfville (W)	
	Rockland (W)	(in total) 10%

Hydrology:

Headwaters and middle reaches of rivers common; lower reaches of rivers in southeast section; dendritic drainage dominant; medium to large lakes common.

Landforms:

Well drained undulating terrain; poorly drained flats.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Well drained red spruce - white pine - eastern hemlock (red oak) undulating terrain with patch/infrequent stand initiating/frequent stand initiating/stand maintaining natural disturbance regime;
Poorly drained black spruce - larch flats with infrequent stand initiating natural disturbance regime.

Landscape 8 - Shelburne River Plain

A flat 87,217 hectare expanse of barren/semi-barren and Acadian coniferous forest types on predominantly hummocky terrain, characterized by a relatively hot, dry, interior climate and a variety of coarse-textured glacial deposits. Drainage is radial and defined by headwaters of several major river systems and scattered lakes.

Bedrock:

Major:	Late Devonian granites	90%
Minor:	Cambrian/Ordovician greywacke	10%

Surficial Materials:

Major:	Stony tilt	90%
Minor:	Glacially scoured bedrock	5%
	Hummocky ground moraine	5%

Soils:

Major:	Gibraltar (W)	90%
Minor:	Liverpool (I)	5%
	Rockland (W)	5%

Hydrology:

Headwaters of several major river systems; radial drainage; scattered medium to large lakes.

Landforms:

Well drained hummocky terrain.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Semi-barrens;
Well drained black spruce - white pine (eastern hemlock, red oak), hummocky terrain with frequent stand initiating/stand maintaining natural disturbance regime.

Landscape 9 - Roseway River Glacial Plain

A large 218,105 hectare, low relief, tilted plain, characterized by Acadian coniferous and non-forested ecosystems on a variety of glacial deposits. Drainage is parallel, with several large south-flowing rivers and many lakes.

Bedrock:

Major:	Cambrian/Ordovician greywacke	50%
Minor	Devonian/Carboniferous trondjhemite-tonalite	30%
	Cambrian/Ordovician gneiss	15%
	Others	5%

Surficial Materials:

Major	Stony till	80%
Minor:	Glaciofluvial deposits	10%
	Hummocky ground moraine	5%
	Organic deposits	5%

Soils:

Major:	Gibraltar (W)	60%
	Liverpool (I)	30%
Minor:	Aspotogan (P)	10%

Hydrology:

Parallel drainage pattern; several large south-flowing rivers; scattered medium to large lakes.

Landforms:

Well drained hummocky terrain.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Well drained red/black spruce - eastern hemlock - white pine (red oak) hummocky terrain with patch/infrequent stand initiating/frequent stand initiating/stand maintaining natural disturbance regime;
Barren/semi-barren.

Landscape 10 - Tusket Islands

A low relief, 35,321 hectare indented coastal unit characterized by many drumlin islands, headlands and saltmarshes. This landscape includes typical boreal coastal coniferous forest, several major river mouths and short internal, often parallel streams.

Bedrock:

Major:	Cambrian Ordovician greywacke	60%
Minor:	Devonian/Carboniferous trondjhemite-tonalite	15%
	Cambrian/Ordovician slate	10%
	Devonian/Carboniferous granite	10%
	Cambrian/Ordovician gneiss	5%

Surficial Materials::

Major:	Stony till with stony till drumlins	90%
Minor:	Glaciofluvial deposits	5%
	Marine deposits	5%

Soils:

Major:	Aspotogan (P)	40%
	Liverpool (I)	25%
Minor:	Hebert (R)	10%
	Gibraltar (W)	15%
	Chaswood (P)	10%

Hydrology:

Several major river mouths; short, internal, parallel streams common; few medium to large lakes.

Landforms:

Well drained undulating terrain; islands.

Coastal Environment:

Indented, low coast; eroding drumlins and drumlin islands, saltmarshes.

Dominant Landscape Ecosystems:

Well drained white spruce - balsam fir (black spruce) undulating terrain with patch/infrequent stand initiating/frequent stand initiating nature disturbance regime; Islands.

Landscape 11 - Shelburne Headlands

A 64,656 hectare, low relief, indented coastal unit characterized by many large headlands and large bays. This landscape features typical boreal coastal coniferous forest, seven major river mouths, and short, internal dendrite streams.

Bedrock:

Major:	Cambrian/Ordovician greywacke	80%
Minor:	Devonian/Carboniferous trondjhemite-tonalite	10%
	Devonian/Carboniferous granite	5%
	Cambrian/Ordovician gneiss	5%

Surficial Materials:

Major:	Stony till	75%
Minor:	Hummocky ground moraine	15%
	Glacially scoured bedrock	5%
	Organic deposits	5%

Soils:

Major:	Lydgate (I)	45%
	Aspotogan (P)	35%
Minor:	Cobequid (W)	5%
	Gibraltar (W)	5%
	Rockland (W)	5%
	Organic soils (P)	5%

Hydrology:

Mouths of seven major river systems; scattered, medium-sized lakes; short, internal, dendritic streams common.

Landforms:

Well drained undulating terrain.

Coastal Environment:

Indented, low coast, large headlands and large, long bays; large barrier beaches and spits common.

Dominant Landscape Ecosystems

Well drained white spruce - balsam fir (black spruce) undulating terrain with patch/infrequent stand initiating/frequent stand initiating natural disturbance regime; Bays.

Landscape 12 - Sable River Basin

A dish-shaped, virtually uninterrupted 94,368 hectare expanse of flat, poorly drained terrain with scattered hills. This landscape is dominated by edaphic Acadian coniferous forest types and an abundance of large wetland types. Drainage is dendritic and rectangular.

Bedrock:

Major:	Cambrian/Ordovician greywacke	95%
Minor	Cambrian/Ordovician slate	5%

Surficial Materials:

Major:	Stony till	55%
	Organic deposits	35%
Minor:	Hummocky ground moraine	10%

Soils:

Major:	Gibraltar (W)	50%
	Liverpool (I)	30%
Minor:	Organic soils (P)	15%
	Lydgate (I)	5%

Hydrology:

Rectangular drainage with some dendritic drainage; few, long, major rivers; few, medium to large lakes.

Landforms:

Imperfectly drained undulating terrain; poorly drained flats.

Coastal Environment:

N/A

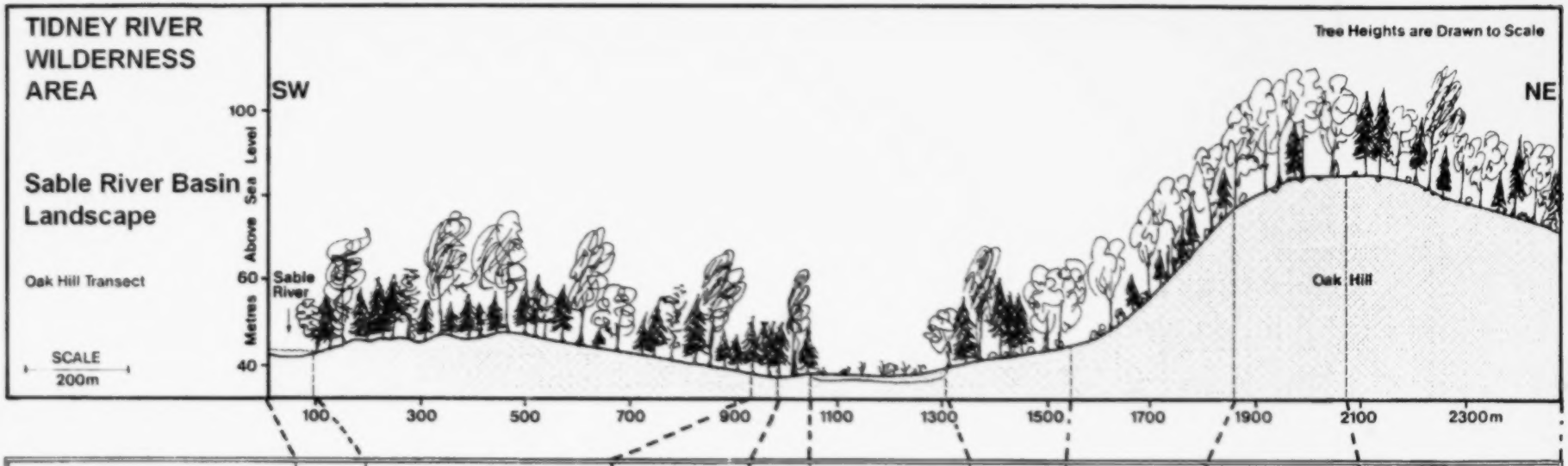
Dominant Landscape Ecosystems:

Imperfectly drained black spruce - red spruce - balsam fir (white pine) undulating terrain with frequent stand initiating natural disturbance regime;
Poorly drained black spruce - larch flats with infrequent stand initiating natural disturbance regime.

TIDNEY RIVER WILDERNESS AREA

Sable River Basin Landscape

Oak Hill Transect



ECOSYSTEM	River	Imperfectly drained coniferous hummocky terrain (#7)			Bog (#3)	see #7	Well drained mixedwood hill (ecosystem #9)		
Ecosystem Section		Coniferous undulating terrain (CUT)	Coniferous flat + stream	See CUT	Poor fen	See CUT	Deciduous slope	Deciduous hillcrest	Mixedwood hilltop and gentle slope

PHYSICAL

Landform		Undulating terrain	Depression	See CUT	Depression	See CUT	Slope	Hillcrest	Hilltop + gentle slope
Microtopography		Variable	Hummocky		Hummocky		Hummocky, large boulders	Hummocky	Hummocky, bouldery
Drainage		Imperfectly drained	Poorly drained		Poorly drained		Well drained	Well drained	Well to moderately drained
Slope		<3°	<1°		0°		5-12°	0-5°	0-5°
Aspect		Southwest/northeast					Southwest	Southwest	Northeast

BIOLOGICAL

Overstory		bS,wP,La	La,bS+rM,wP	See CUT	Scattered La,bS	See CUT	rO,rM,wB+La	rM,rO,yB	rM,rO,wB+bS,wP
Understory		bS,La+bF,rM	La,bS		----		rM,wB,bF,bS	bS,bF	bS,bF,yB,rM
Regeneration		bS,bF,rM,La,wP	La,bS,rM		----		bF,bS,rM+rO	rM,rO,bF	bF,bS,rM,rO
Groundcover		Bracken fern, bunchberry, lambkill	Mosses		Sedges, Sphagnus sp., ericaceous shrubs		Huckleberry, lambkill, blueberry	Wood fern, starflower	Huckleberry, lambkill, mosses
Overstory Condition		Mature	Mature		----		Mature	Mature	Mature
Average Age		70-90 years	40-80 years		----		60-90 years	60-90 years	60-90 years

Landscape 13 - Lake Rossignol Hills

A 143,967 hectare landscape characterized by broad, low hills and drumlinoid hills superimposed on an undulating to flat plain with Acadian mixed forest types and an abundance of large wetland types. Drainage is dendritic and parallel.

Bedrock:

Major:	Cambrian/Ordovician greywacke	65%
	Cambrian/Ordovician slates	35%
Minor:		

Surficial Materials:

Major:	Stony till	95%
Minor:	Organic deposits	5%

Soils:

Major:	Gibraltar (W)	50%
	Liverpool (I)	35%
Minor:	Barney (W)	15%

Hydrology:

Lower to middle sections of few large rivers; dendritic and parallel drainage; scattered large lakes.

Landforms:

Well drained hills; well drained undulating terrain.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech hills with gap natural disturbance regime;
Well drained red spruce - eastern hemlock - white pine undulating terrain with patch/infrequent stand initiating natural disturbance regime.

Landscape 14 - Mahone Bay Islands

A 34, 442 hectare indented, low coastal unit dominated by drumlin islands and headlands with Acadian mixed forest types mixed with boreal coniferous forest along the immediate coast. Drainage is dendritic. Shores are predominantly rocky with scattered, major beaches.

Bedrock:

Major:	Cambrian/Ordovician slate	60%
Minor:	Devonian/Carboniferous granite	15%
	Cambrian/Ordovician greywacke	15%
	Early Carboniferous sedimentary rocks	10%

Surficial Materials:

Major:	Stony till with silty till drumlins	90%
Minor:	Hummocky ground moraine	5%
	Glacially scored bedrock	5%

Soils:

Major:	Gibraltar (W)	45%
	Barney (W)	45%
Minor:	Wolfville (W)	5%
	Rockland (W)	5%

Hydrology:

Mouths of many small rivers and few, medium to large estuaries; very few small lakes; dendritic drainage.

Landforms:

Well drained undulating terrain; well drained drumlins.

Coastal Environment:

Indented, low coast, eroding drumlins and drumlin islands; many bays and major barrier beaches.

Dominant Landscape Ecosystems:

Well drained white spruce - balsam fir - (black spruce) undulating terrain with patch/infrequent stand initiating/frequent stand initiating natural disturbance regime; Well drained sugar maple - yellow birch - American beech (red spruce, eastern hemlock, white pine) drumlins with gap natural disturbance regime.

Landscape 15 - LaHave Drumlins

A 258,157 hectare drumlin field superimposed on a hummocky to flat, gently tilted plain, and characterized by Acadian mixed forest types. Drainage is dendritic and is defined by many lakes and waterways, particularly the LaHave River.

Bedrock:

Major:	Cambrian/Ordovician slate	75%
Minor:	Cambrian/Ordovician greywacke	15%
	Devonian/Carboniferous granite	10%

Surficial Materials:

Major:	Stony till with silty till drumlins	60%
	Silty till with silty till drumlins	25%
Minor:	Glacially scoured bedrock with silty till drumlins	15%

Soils:

Major:	Barney (W)	65%
Minor:	Wolfville (W)	20%
	Gibraltar (W)	10%
	Rockland (W)	5%

Hydrology:

Dendritic drainage dominates with locally deranged and parallel drainage patterns; few major rivers, including most of LaHave River system; many small streams, many small lakes and few large lakes.

Landforms:

Well drained undulating terrain; well drained drumlins.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech (red spruce, eastern hemlock, white pine, red pine) drumlins with gap natural disturbance regime;
Well drained red spruce - eastern hemlock - white pine undulating terrain with patch/infrequent stand initiating natural disturbance regime.

Landscape 16 - Fisher Lake Drumlins

A 52,024 hectare drumlin plain characterized by predominantly Acadian coniferous forest on undulating terrain and drumlins. Drainage is dendritic and consists of the upper reaches of several rivers and scattered lakes.

Bedrock:

Major:	Devonian/Carboniferous granite	100%

Surficial Materials:

Major:	Stony till with stony till drumlins	45%
	Stony till with silty till drumlins	35%
Minor:	Silty till with silty till drumlins	15%
	Glacially scoured bedrock	5%

Soils:

Major:	Gibraltar (W)	100%

Hydrology:

Dendritic drainage, upper reaches of several rivers, scattered large lakes, some small lakes.

Landforms:

Well Drained undulating terrain, well drained drumlins.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Well drained red spruce - eastern hemlock - white pine undulating terrain with patch/infrequent stand initiating natural disturbance regime;
Well drained red spruce - eastern hemlock - white pine (sugar maple, yellow birch, American beech) drumlins with patch/infrequent stand initiating natural disturbance regime.

Landscape 17 - Minas Basin Headlands

A 23, 141 hectare, high relief coastal unit sandwiched between the Cobequid Fault and Minas Basin, characterized by Acadian mixed forest types on a series of hills and undulating terrain. Drainage is parallel and locally radial. The coast is cliffed (up to 150 m high) with some low coastal plain, saltmarshes and estuaries of few, moderate-sized rivers.

Bedrock:

Major:	Late Carboniferous sandstone	80%
Minor:	Late Triassic conglomerate	5%
	Triassic/Jurassic basalt	5%
	Early Jurassic wacke	5%
	Others	5%

Surficial Materials:

Major:	Silty till	90%
Minor:	Glaciofluvial deposits	5%
	Other	5%

Soils:

Major:	Queens (I)	30%
	Barney (W)	30%
Minor:	Hebert (R)	15%
	Joggins (P)	10%
	Gibraltar (W)	10%
	Cobequid (W)	5%

Hydrology:

Parallel drainage with local radial drainage, lower reaches and estuaries of few moderate-sized rivers, no lakes.

Landforms:

Well drained hills, imperfectly drained undulating terrain.

Coastal Environment:

Predominantly cliffed coast, up to 150m, and some low coastal plain, few islands, broad mud flats common, especially towards the east, scattered saltmarshes.

Dominant Landscape Ecosystems:

Well drained red spruce - sugar maple - yellow birch - American beech hills with patch/infrequent stand initiating natural disturbance regime;
Imperfectly drained red spruce - black spruce undulating terrain with patch/frequent stand initiating natural disturbance regime.

Landscape 18 - Chignecto Slopes

A ridged, upland landscape with a steeply inclined south-facing slope and a gentle, north-facing slope, and which is characterized by predominantly Acadian coniferous forest rolling terrain and canyons. Most of the 48,144 hectare area is heavily dissected by dendritic, north flowing streams and rivers and parallel south-flowing and west-flowing streams. Coastal sections are predominantly cliffed (up to 200 m.) With generally narrow and sand cobble shores.

Bedrock:

Major:	Lake Carboniferous conglomerate	65%
Minor:	Devonian/Carboniferous wacke	15%
	Devonian/Carboniferous granite	10%
	Mid-Devonian volcanic	5%
	Hadrynian volcanic	5%

Surficial Materials:

Major:	Silty till	60%
Minor:	Colluvial deposits	10%
	Glaciofluvial deposits	10%
	Residuum	10%
	Stony till	10%

Soils:

Major:	Westbrook (W)	50%
	Barney (W)	25%
	Cobequid (W)	25%

Hydrology:

Dendritic north-flowing and parallel south flowing and west-flowing drainage patterns; many small rivers, few moderate-sized rivers, few small lakes.

Landforms:

Well drained rolling terrain, well drained canyon.

Coastal Environment:

Predominantly cliffed coast, up to 200 m.; few coves or beaches, no islands.

Dominant Landscape Ecosystems:

Well drained red spruce (yellow birch), rolling terrain with infrequent stand initiating natural disturbance regime;
Well drained red spruce canyon with infrequent stand initiating natural disturbance regime.

Landscape 19 - Chignecto Ridged Plain

A 114,529 hectare, elevated coastal to interior plain dominated by hummocky to ridged terrain characterized by Acadian coniferous forests. Western areas are dominated by a coniferous/barren ridge topography with parallel drainage, while eastern areas consist of predominantly coniferous rolling terrain with dendritic drainage. Coastal areas are dominated by low bedrock cliffs and an adjacent, wide, intertidal, bedrock platform and mud flats.

Bedrock:

Major:	Late Carboniferous sandstone	100%

Surficial Materials:

Major:	Silty till	40%
	Stony till	35%
Major:	Glacially scoured bedrock	10%
	Hummocky ground moraine	10%
	Glaciofluvial deposits	5%

Soils:

Major:	Gibraltar (W)	35%
	Debert (I)	25%
	Westbrook (W)	25%
Minor:	Joggins (P)	5%
	Queens (I)	5%
	Tormentine (W)	5%

Hydrology:

Dendritic and parallel drainage, few moderate sized rivers (east) and short rivers (west), very few small lakes.

Landforms:

Well drained rolling terrain, imperfectly drained undulating terrain.

Coastal Environment:

Low to moderately high cliffs, up to 20 m., common; wide intertidal bedrock platform and local mud flats and small saltmarshes.

Dominant Landscape Ecosystems:

Well drained red spruce (sugar maple, yellow birch), rolling terrain with infrequent stand initiating natural disturbance regime;
Imperfectly drained red spruce - black spruce undulating terrain with infrequent stand initiating natural disturbance regime.

Landscape 20 - Cumberland Foothills

A 27, 546 hectare, elongated, narrow band of low elevation foothills, abutting the north side of Cobequid Mountain, and supporting Acadian mixed forest hills and rolling terrain. Drainage is dendritic and defined by middle and/or upper sections of various rivers.

Bedrock:

Major:	Late Carboniferous sandstone	90%
Minor:	Others	10%

Surficial Materials:

Major:	Silty till	80%
Minor:	Glaciofluvial deposits	20%

Soils:

Major:	Westbrook (W)	85%
	Queens (I)	10%
	Hebert (R)	5%

Hydrology:

Dendritic drainage; middle and/or upper sections of various rivers; no lakes.

Landforms:

Well drained hills, well drained rolling terrain.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech hills with gap natural disturbance regime;
Well drained red spruce (eastern hemlock), rolling terrain with patch/infrequent stand initiating natural disturbance regime.

Landscape 21 - Tantramar Marshes

A small 10,060 hectare, low lying coastal landscape characterized by extensive saltmarshes and brackish to freshwater wetlands; it includes estuaries of several moderate-sized rivers.

Bedrock:

Major:	Early-late Carboniferous sandstones and carbonates	100%
Minor:		

Surficial Materials:

Major:	Marine deposits	80%
Minor:	Organic deposits	20%

Soils:

Major:	Acadia (I-P)	90%
Minor:	Others	10%

Hydrology:

Dendritic drainage; estuaries of several moderate-sized rivers; few small lakes.

Landforms:

Tidal marsh, freshwater wetlands.

Coastal Environment:

Saltmarshes, mud flats.

Dominant Landscape Ecosystems:

Tidal marsh;
Freshwater wetlands.

Landscape 22 - Northumberland Strain Plain

A relatively flat to gently undulating 272,048 hectare plain, almost exclusively dominated by Acadian coniferous forest types. Drainage is dendritic in eastern and western areas and rectangular in the central portion. The middle to lower reaches of several major rivers are included. The low coast consists of unresistant till and rock cliffs, with fine-grained beaches and local saltmarshes.

Bedrock:

Major	Late Carboniferous sandstone	95%
Minor:	Mid-Devonian sedimentary/volcanic	5%

Surficial Materials:

Major:	Silty till	70%
Minor:	Hummocky ground moraine	20%
	Glaciofluvial deposits	5%
	Stoney till	5%:

Soils:

Major:	Queens (I)	30%
	Tormentine (W)	30%
	Debert (I)	25%
Minor:	Masstown (P)	10%
	Others	5%

Hydrology:

Dendritic (east and west) and rectangular (central) drainage; middle to lower reaches of several major rivers; very few, small-sized to moderate-sized lakes.

Landforms:

Imperfectly drained undulating terrain; poorly drained flats.

Coastal Environment:

Unresistant low rock and till cliffs, 3-10 m. high; locally significant saltmarshes, barrier beaches and spits.

Dominant Landscape Ecosystems:

Imperfectly drained red spruce - balsam fir - white spruce undulating terrain with patch/infrequent stand initiating natural disturbance regime;
Poorly drained black spruce - larch flats with infrequent stand initiating natural disturbance regime.

Landscape 23 - Cobequid Mountain

A linear, 160,858 hectare, relatively smooth-topped upland area that is characterized by very broad, flat-topped to gently-rounded deciduous hills, and by coniferous undulating terrain and stream valleys, producing an overall Acadian mixed forest landscape. Drainage is parallel and dendritic and is defined by headwaters of many rivers.

Bedrock:

Major:	Hardrynian to Devonian complex of meta-volcanic and Meta-sedimentary rocks	100%
Minor:		

Surficial Materials:

Major:	Glacially scored bedrock	35%
	Stony till	30%
	Silty till	30%
Minor:	Glaciofluvial deposits	5%

Soils:

Major:	Cobequid (W)	90%
Minor:	Westbrook (W)	10%

Hydrology:

Parallel and dendritic drainage; headwaters of many rivers; scattered small lakes.

Landforms:

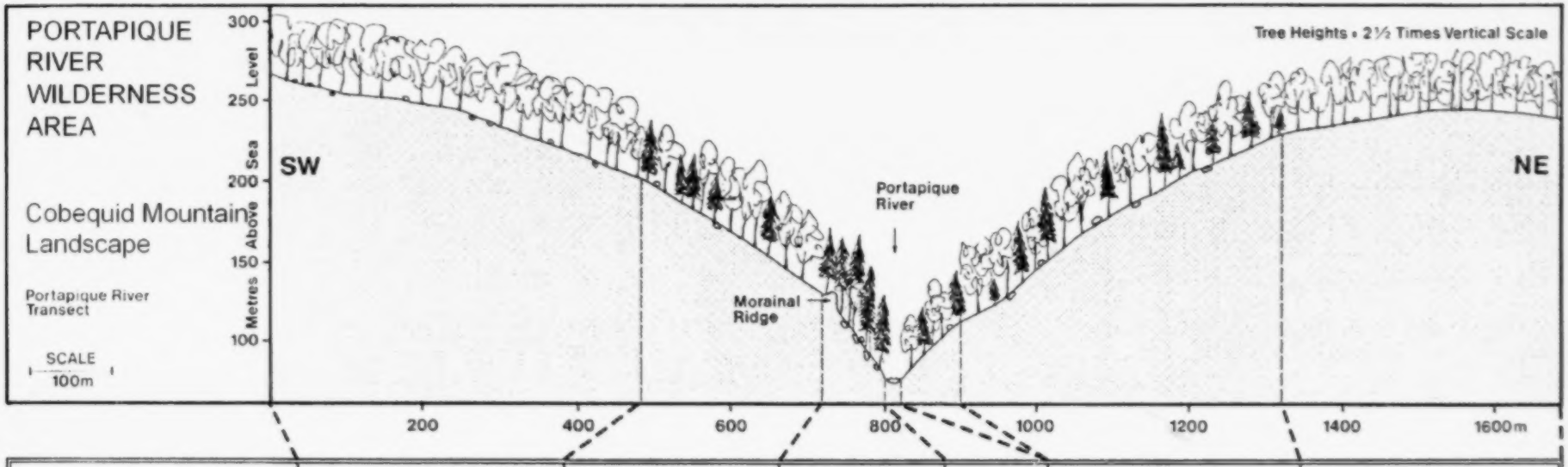
Well drained hills; well drained undulating terrain.

Coastal Environment:

N/A.

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech hills with gap natural disturbance regime;
Well drained red spruce undulating terrain with patch/infrequent stand initiating natural disturbance regime.



ECOSYSTEM	Well drained rounded deciduous hill	Well drained rolling mixedwood terrain	Well drained coniferous canyon	River	Well drained rolling mixedwood terrain	Well drained rounded deciduous hill

PHYSICAL

Landform	Rounded hill	Slope	Canyon slopes	Slope	Rounded hill
Microtopography	Scattered boulders, hummocky	Scattered boulders, hummocky	Abundant boulders, some rock faces	Scattered boulders, hummocky	Hummocky, few boulders
Drainage	Well drained	Well drained, local seepage	Well drained, moist	Well drained	Well drained
Slope	5-10°	10-20°	15-70°	10-30°	0-10°
Aspect	Northeast	Northeast	Northeast and southwest	Southwest	Southwest

BIOLOGICAL

Overstory	sM,yB,Be	sM,yB,rS+bF,wS	rS,bF,yB+rM,wB	rS,sM,yB+bF,wB	sM+Be,rM
Understory	sM,Be+yB	sM,yB,rS,bF+wS	bF,wB,yB,rS,sM	yB,rS,wB,sM,rM+Be,wA	sM+Be
Regeneration	sM,StM+yB,Be	sM,bF,rS	rS,bF,yB,sM	sM,bF,rS,rM	sM,rM,StM
Groundcover	Wood fern, wood sorrel, violet sp. and hobblebush	Wood fern, wood sorrel	Liverwort and other mosses, wood fern	Wood fern, sarsaparilla, wood sorrel	Wood fern, marginal fern, wood aster
Overstory Condition	Mature	Mature	Mature	Mature	Mature
Average Age	70-100 years	70-100 years	80-100 years	60-90 years	50-60 years

Landscape 24 - South Cobequid Foothills

A 26,931 hectare landscape characterized by a series of well-rounded hills abutting the southern edge of the Cobequid Mountain and supporting Acadian mixwood forest. Drainage is parallel and dendritic and is defined by the middle reaches of several moderate sized rivers.

Bedrock:

Major:	Late Carboniferous sandstone	75%
Minor:	Late Triassic clastic sedimentary rocks	20%
	Others:	5%

Surficial Materials:

Major:	Silty till	90%
Minor:	Hummocky ground moraine	10%

Soils:

Major:	Gibraltar (W)	60%
Minor:	Queens (I)	20%
	Westbrook (W)	10%
	Tormentine (W)	10%

Hydrology:

Parallel and dendritic drainage; middle reaches of several moderate-sized rivers; no lakes.

Landforms:

Well drained hills.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech - red spruce (eastern hemlock) hills with gap natural disturbance regime.

Landscape 25 - Cobequid Tidal Bay

A 42,104 hectare, coastal lowland area surrounding Cobequid Bay and characterized by predominantly Acadian coniferous undulating terrain and flats. Drainage is dendritic and includes the lower reaches and estuaries of several major rivers. The coast predominantly consists of a low coastal plain with wide intertidal mud or sand flats and saltmarshes.

Bedrock:

Major:	Late Triassic clastic sedimentary rocks	95%
Minor:	Early Carboniferous sedimentary rocks	5%

Surficial Materials:

Major:	Silty till	75%
Minor:	Hummocky ground moraine	10%
	Glaciofluvial deposits	10%

Soils:

Major:	Tormentine (W)	60%
Minor:	Masstown (P)	10%
	Acadia complex (I-P)	10%
	Hebert (R)	10%
	Others	10%

Hydrology:

Dendritic drainage; lower reaches and estuaries of several major rivers; very few lakes.

Landforms:

Well drained undulating terrain; imperfectly drained flats.

Coastal Environment:

Low coastal plain and eroding, non-resistant cliffs up to 20 m.; wide intertidal mud or sand flats on rock platform; saltmarshes in sheltered areas.

Dominant Landscape Ecosystems:

Well drained red spruce undulating terrain with patch/infrequent stand initiating natural disturbance regime;
Imperfectly drained red spruce - black spruce flats with patch/infrequent stand initiating natural disturbance regime.

Landscape 26 - Central Rolling Hills

A 106,041 hectare landscape consisting of an elevated series of hills and undulating terrain supporting Acadian mixed forest types. Drainage is dendritic and defined by the upper and middle reaches of a few moderate-sized rivers.

Bedrock:

Major:	Early-late Carboniferous sandstones	95%
Minor:	Others	5%

Surficial Materials:

Major:	Silty till	50%
Minor:	Residuum	20%
	Glacially scoured bedrock	15%
	Hummocky ground moraine	10%
	Glaciofluvial deposits	5%

Soils:

Major:	Gibraltar (W)	35%
	Wolfville (W)	35%
Minor:	Queens (I)	15%
	Cobequid (W	10%
	Barney (W)	5%

Hydrology:

Dendritic drainage; upper and middle reaches of few moderate-sized rivers; very few small lakes.

Landforms:

Well drained hills; perfectly drained undulating terrain.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech - red spruce (eastern hemlock) hills with gap natural disturbance regime;
Imperfectly drained red spruce - black spruce (eastern hemlock) undulating terrain with patch/infrequent stand initiating natural disturbance regime.

Landscape 27 - Walton River Clay Plain

A predominantly flat 32,675 hectare plain characterized by edaphic Acadian coniferous forest types and many wetlands on flat to hummocky terrain. Drainage is mainly dendritic and is defined by headwaters and upper reaches of a few moderate-sized rivers.

Bedrock:

Major:	Early-late Carboniferous sandstones and carbonates	100%
Minor:		

Surficial Materials:

Major:	Silty till	90%
Minor:	Organic deposits	10%

Soils:

Major:	Kingsville (P)	75%
Minor:	Queens (I)	15%
	Organic soils (P)	10%

Hydrology:

Predominantly dendritic drainage; headwaters and upper reaches of moderate-sized rivers; very few small lakes.

Landforms:

Poorly drained flats; imperfectly drained undulating terrain.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Poorly drained black spruce - larch flats with patch/infrequent stand initiating natural disturbance regime;
Imperfectly drained black spruce - red spruce (white pine, red pine) undulating terrain with patch/infrequent stand initiating natural disturbance regime.

Landscape 28 - Shubenacadie River Rolling Hills

A 244,447 hectare landscape characterized by a series of hills and undulating terrain and supporting Acadian coniferous-dominated forest types. Drainage is dendritic, but locally rectangular, and is defined by various portions of several large rivers. Coastal sections consist of eroding, low cliffs, wide intertidal flats, and several large estuaries.

Bedrock:

Major:	Early-late Carboniferous sandstones, other clastic sedimentary rocks, and carbonates	95%
Minor:	Cambrian/Ordovician slates	5%

Surficial Materials:

Major:	Silty till	90%
Minor:	Alluvial deposits	5%
	Glaciofluvial deposits	5%

Soils:

Major:	Queens (I)	60%
Minor:	Tormentine (W)	15%
	Wolfville (W)	20%
	Stewiacke (W)	5%

Hydrology:

Predominantly dendritic, locally rectangular drainage; various portions of several large rivers, including several large estuaries; very few lakes.

Landforms:

Well drained hills; well drained undulating terrain.

Coastal Environment:

Eroding, non-resistant, low cliffs; wide intertidal mud or sand flats; saltmarshes in estuaries.

Dominant Landscape Ecosystems:

Well drained red spruce - sugar maple - American beech (eastern hemlock) hills with gap natural disturbance regime;
Imperfectly drained red spruce - black spruce (eastern hemlock, white pine) undulating terrain with patch/infrequent stand initiating natural disturbance regime.

Landscape 29A - Interior Ridges (Rawdon Hills)
Landscape 29 B - Interior Ridges (Whittenburg Ridge)

A pair of low, deeply dissected, elongated ridges forming a series of flat-topped hills that support Acadian deciduous-dominated forest types. Interior Ridges (Rawdon Hills) is 21,154 hectares and Interior Ridges (Whittenburg Ridge) is 32,363 hectare. Drainage is parallel and is defined by deeply incised headwater streams.

Bedrock:

Major:	Cambrian/Ordovician slates	85%
Minor:	Early Carboniferous sandstones and carbonates	10%
	Others	5%

Surficial Materials:

Major:	Silty till	75%
Minor:	Stony till	20%
	Glacially scoured bedrock	5%

Soils:

Major:	Barney (W)	50%
	Queens (I)	30%
Minor:	Wolfville (W)	15%
	Tormentine (W)	5%

Hydrology:

Predominantly parallel drainage; several small streams; very few, extremely small lakes.

Landforms:

Well drained hills.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech (red spruce, eastern hemlock) hills with gap/patch natural disturbance regime.

Landscape 30A - Central Quartzite Hills and Plains (Shubenacadie Lake)
Landscape 30B - Central Quartzite Hills and Plains (Fish River)

A complex of hills and bedrock-controlled, rolling terrain characterized by Acadian mixed forest types, and occurring as two sub-landscapes. Central Quartzite Hills and Plains (Shubenacadie Lake) is 130, 756 hectares and Central Quartzite Hills and Plains (Fish River) is 26, 423 hectares. Drainage is predominantly dendritic but locally parallel and rectangular, and is defined by many small to moderate-sized rivers and various-sized lakes.

Bedrock:

Major:	Cambrian/Ordovician greywacke	80%
Minor:	Cambrian/Ordovician slates	15%
	Others	5%

Surficial Materials:

Major:	Stony till	605
	Silty till	25%
Minor:	Glacially scoured bedrock	15%

Soils:

Major:	Gibraltar (W)	40%
	Wolfville (W)	40%
Minor:	Liverpool (I)	10%
	Rockland (W)	10%
	Other	5%

Hydrology:

Predominantly dendritic, locally parallel/rectangular drainage; many small-sized to moderate-sized rivers; abundance of various sized lakes.

Landforms:

Well drained red spruce - white pine (eastern hemlock) rolling terrain with patch/infrequent stand initiating natural disturbance regime.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech hills with gap natural disturbance regime;
Well drained red spruce - white pine (eastern hemlock) rolling terrain with patch/infrequent stand initiating natural disturbance regime.

Landscape 31 - Sackville Drumlins

A small 12,426 hectare drumlin field characterized by Acadian mixed forest drumlins and intervening rolling terrain. Drainage is dendritic and is defined by several small rivers or portions of moderate-sized rivers, and by several moderate-sized lakes.

Bedrock:

Major:	Cambrian/Ordovician greywacke	55%
	Cambrian/Ordovician slates	45%
Minor:		

Surficial Materials:

Major:

Major:	Stony till with silty till drumlins	50%
	Silty till with silty till drumlins	50%
Minor		

Soils:

Major:	Wolfville (W)	55%
	Gibraltar (W)	35%
Minor:	Liverpool (I)	10%

Hydrology:

Dendritic drainage; several small rivers or portions of moderate-sized rivers; several moderate-sized lakes.

Landforms:

Well drained drumlins; well drained rolling terrain.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech drumlins with gap natural disturbance regime;
Well drained red spruce - white pine (eastern hemlock) rolling terrain with patch/infrequent stand initiating natural disturbance regime.

Landscape 32 - Pennant Granite Barrens

This low and rugged 21, 072 hectare coastal unit is dominated by a mosaic of boreal, coastal coniferous undulating terrain, and by barrens. Drainage is bedrock controlled and roughly parallel in two directions, southeast or south-southwest, and features middle to lower reaches of small, scattered rivers and many small to moderate sized lakes. The indented coast is characterized by a mix of low rocky shore and rugged bedrock headlands and islands.

Bedrock:

Major:	Devonian/Carboniferous granite	100%
Minor:		

Surficial Materials:

Major:	Glacially scoured bedrock	50%
	Stony till	45%
Minor:	Silty till	5%

Soils:

Major:	Rockland (W)	50%
	Gibraltar (W)	45%
Minor:	Liverpool (I)	5%

Hydrology:

Dendritic drainage; lower reaches of very small, scattered rivers; many small-sized to moderate-sized lakes.

Landforms:

Well drained undulating terrain.

Coastal Environment:

Low, bedrock dominated, rugged, indented coast; very few beaches; few, small saltmarshes; islands uncommon in east and scattered to common elsewhere.

Dominant Landscape Ecosystems:

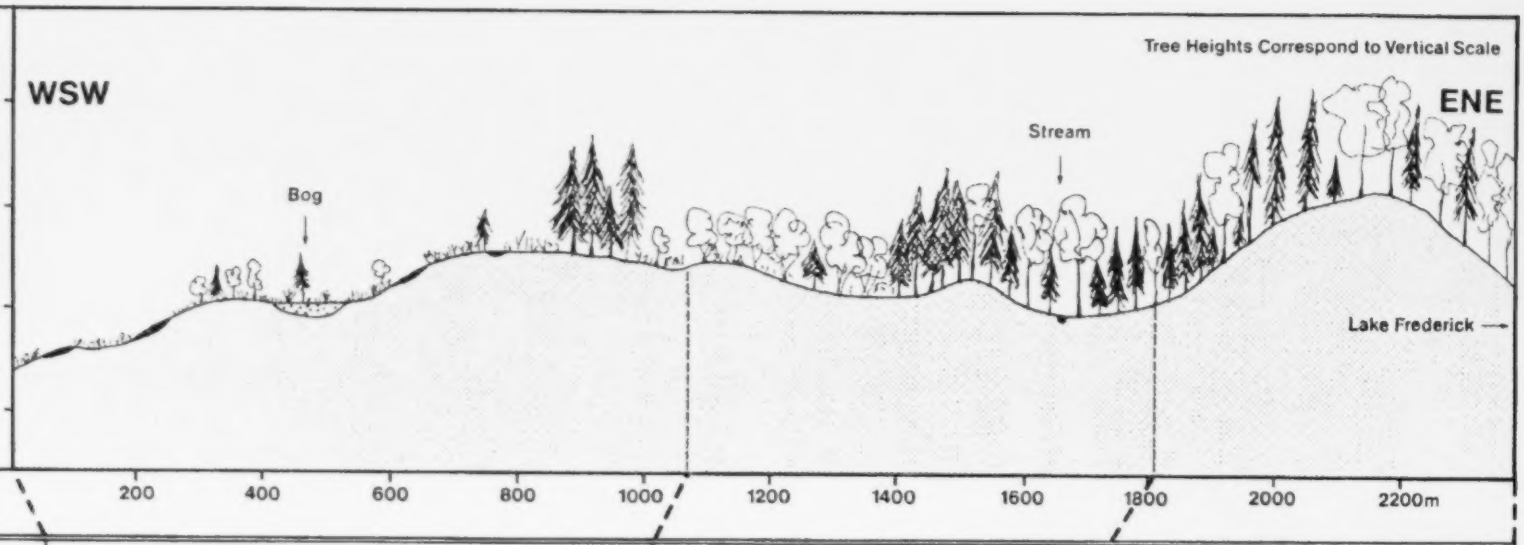
Well drained white spruce - black spruce - balsam fir undulating terrain with patch/infrequent stand initiating natural disturbance regime;
Barrens.

TERENCE BAY WILDERNESS AREA

Pennant Granite Barrens

Lake Frederick Transect

SCALE 200m



ECOSYSTEM	Barrens and semi-barrens	Well to imperfectly drained coniferous rough undulations	Well drained mixedwood drumlin

PHYSICAL

Landform	Gently sloping, undulating terrain (bog in depression)	Undulating, terrain	Drumlin
Microtopography	Hummocky, rocky with granite outcrops	Hummocky, rocky	Hummocky, rocky
Drainage	Imperfectly to well drained	Imperfectly to well drained	Well drained
Slope	0-10°	0-10°	0-15°
Aspect	Southwest	Variable	Southwest and northeast

BIOLOGICAL

Overstory	rM,wB,bF+bS (scattered and in patches)	rM,wB,bF,bS+tA	rM,wB,bF+yB
Understory	----	rM,bF,wB,bS+rS	bF,rM,wB,MtA
Regeneration	----	rM,bF,wB,bS	bF,rM,wB,MtA
Groundcover	Ericaceous shrubs; lichens on bedrock	Shrubs, mosses, bracken fern, sarsaparilla	Shrubs, wood + marginal fern, gold thread
Overstory Condition	Young to mature	Young	Young to mature
Average Age	<30 years	15-40 years	30-60 years

Landscape 33 - Eastern Shore Beaches

A 42,694 hectare coastal unit characterized by Acadian and boreal coniferous drumlins and undulating terrain. Drainage is dendritic and parallel and is defined by lower reaches and estuaries of several moderate-sized rivers and many lakes. The coast consists of eroding drumlin headlands alternating with barrier beaches, estuaries and saltmarshes.

Bedrock:

Major:	Cambrian/Ordovician greywacke	75%
	Cambrian/Ordovician slate	25%
Minor:		

Surficial Materials:

Major:	Stony till with silty till drumlins	90%
Minor:	Silty till with silty till drumlins	5%
	Glacially scoured bedrock	5%

Soils:

Major:	Gibraltar (W)	70%
Minor:	Liverpool (I)	10%
	Barney (W)	5%
	Queens (I)	5%
	Rockland (W)	5%
	Wolfville (W)	5%

Hydrology:

Dendritic and parallel drainage; lower reaches and estuaries of several moderate-sized rivers; many small-to-moderate-sized lakes.

Landforms:

Eroding drumlin headlands and long bays; extensive barrier beaches and saltmarshes.

Coastal Environment:

Eroding drumlin headlands and long bays; extensive barrier beaches and saltmarshes.

Dominant Landscape Ecosystems:

Well drained white spruce - black spruce - balsam fir undulating terrain with patch/frequent stand initiating/infrequent stand initiating natural disturbance regime; saltmarsh.

Landscape 34 - Eastern Shore Granite Ridge

A 61,101 hectare, variable, rugged, bedrock-controlled unit characterized by Acadian coniferous parallel ridges. Drainage is parallel and dendritic and is defined by various portions of a few major rivers and many small streams. Lakes of various sizes are abundant.

Bedrock:

Major:	Devonian/Carboniferous granite	100%
Minor:		

Surficial Materials:

Major:	Stony till	85%
Minor:	Glacially scoured bedrock	15%

Soils:

Major:	Gibraltar (W)	85%
Minor:	Rockland (W)	15%

Hydrology:

Parallel and dendritic drainage; various portions of few major rivers and many small rivers; abundance of various sized lakes.

Landforms:

Well drained ridges.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

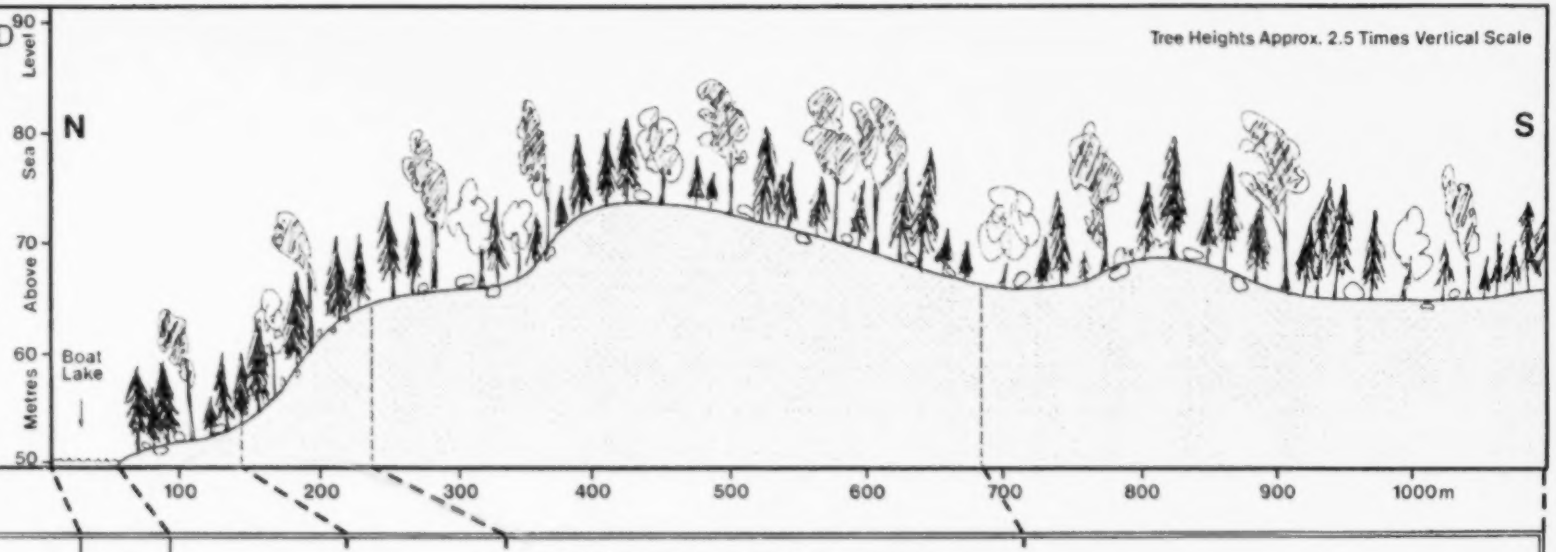
Well drained red spruce - white pine (eastern hemlock, yellow birch, sugar maple) ridges with patch/infrequent stand initiating natural disturbance regime;
Lakes.

TANGIER GRAND LAKE WILDERNESS AREA

Eastern Shore Granite Ridge Landscape

Boat Lake Transect

SCALE 100m



ECOSYSTEM	Lake	Well drained undulating coniferous topography			
Ecosystem Section		Lower slope	Upper slope	Well drained undulating coniferous ridge	Imperfectly drained undulating coniferous ridge

PHYSICAL

Landform	Lake	Lower slope	Upper slope	Ridge	Ridge
Microtopography		Bouldery	Rocky	Bouldery	Bouldery
Drainage		Imperfect	Well drained	Well drained	Imperfectly to poorly drained
Slope		<10°	15-20°	0-15°	0-10°
Aspect		North	Northeast	Northeast/southwest	Northeast/southwest

BIOLOGICAL

Overstory		b/rS,bF+wP,rM	b/rS+wP,rM	rS,bF,wP+rM	rS,wP,bF
Understory		bF,b/rS	b/rS	rS,bF	bF,rM,rS
Regeneration		bF,b/rS	b/rS,bF	rS,bF	bF,rS
Groundcover		Lambkill, Schreber's moss	Lambkill, mosses	Lambkill, Schreber's moss, bracken fern	Lambkill, bracken fern, Schreber's moss
Overstory Condition		Immature to mature	Immature old-growth	Immature to mature	Immature to mature
Average Age		40-70 years	80-120 years	50-100+ years	50-80+ years

Landscape 35 - Eastern Shore Quartzite Plain

A 256,093 hectare undulating to ridged, bedrock controlled plain characterized by Acadian coniferous forest. Drainage is dendritic and rectangular and is defined by headwaters and various portions of several large and many small rivers and an abundance of various sized lakes.

Bedrock:

Major:	Cambrian/Ordovician greywacke	75%
Minor:	Devonian/Carboniferous granite	15%
	Cambrian/Ordovician slates	10%

Surficial Materials:

Major:	Stony till	75%
Minor:	Glacially scoured bedrock	15%
	Hummocky ground moraine	5%
	Organic deposits	5%

Soils:

Major:	Gibraltar (W)	65%
Minor:	Rockland (W)	15%
	Liverpool (I)	15%
	Barney (W)	5%

Hydrology:

Dendritic and rectangular drainage; headwaters and various portions of several large and many small rivers; abundance of various sized lakes.

Landforms:

Well drained undulating terrain; imperfectly drained undulating terrain.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

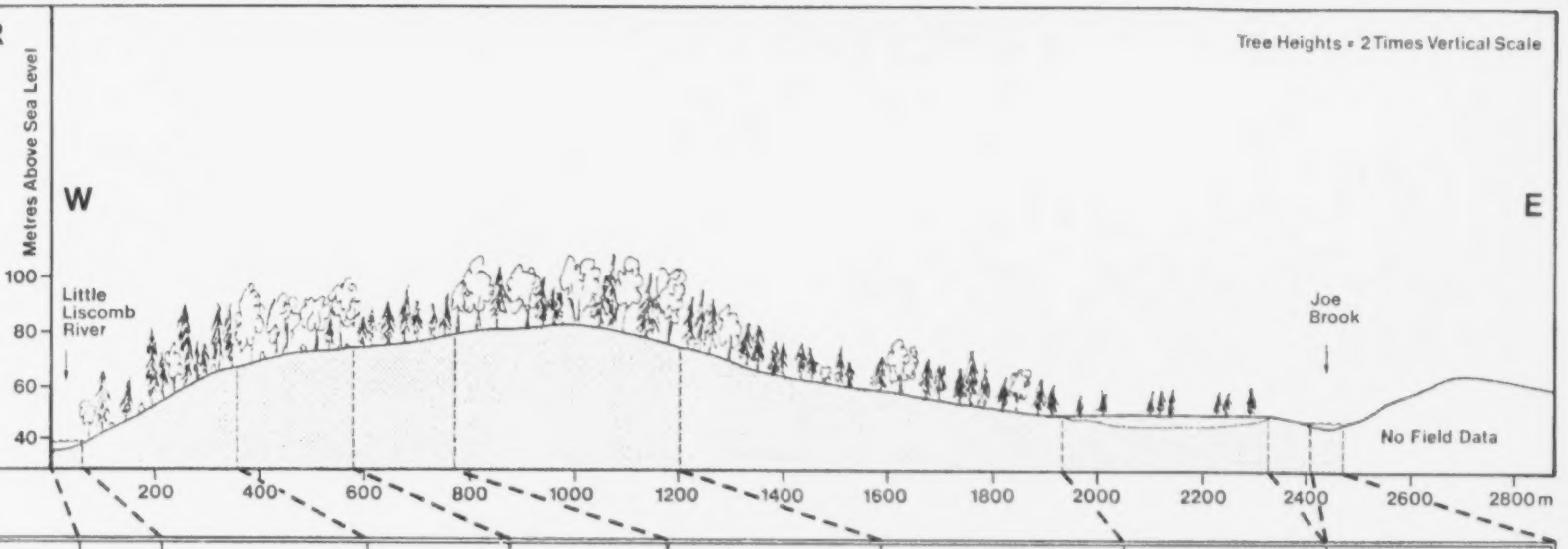
Well drained red spruce - white pine (sugar maple, yellow birch) undulating terrain with patch/infrequent stand initiating natural disturbance regime;
Imperfectly drained red spruce - black spruce undulating terrain with patch/infrequent stand initiating natural disturbance regime.

LISCOMB RIVER WILDERNESS AREA

Eastern Shore Quartzite Plain Landscape

Little Liscomb River to Joe Brook Transect

SCALE 200m



ECOSYSTEM	River	Imperfectly drained hummocky coniferous terrain	Well drained deciduous hill			Imperfectly drained hummocky coniferous terrain	Bog	River
Ecosystem Section		Coniferous sideslope	Deciduous hillcrest	Coniferous flat	Mixedwood gentle slope	Coniferous gentle slope	Treed bog	

PHYSICAL

Landform	River	Sideslope	Hillcrest	Flat	Gentle slope	Gentle slope	Depression	
Microtopography		Boulders	Boulders	Hummocky	Hummocky	Rocky, hummocky	Large hummocks	
Drainage		Imperfectly drained, seepage	Well drained	Imperfectly drained	Imperfectly drained	Well to imperfectly drained	Poorly drained	
Slope		5-15°	0-5°	0-3°	0-3°	2-4°	0°	
Aspect		West	Northwest	Northwest	North	East	----	

BIOLOGICAL

Overstory		bF+bS,wP	rM+wB,Be	bS,bF	rM,bF,bS+wB	bS,bF+rM,jP	La,bS (scattered, stunted)	
Understory		bF+bS	----	bS,bF	bF	bS	----	
Regeneration		bF,bS,rM	rM,bF	bF,rM	bF,rM	bS,bF	----	
Groundcover		Bunchberry, cinnamon fern	Wood fern, wood sorrel	Lambkill, bunchberry, Sphagnum moss	Schreber's moss, bunchberry	Lambkill, bracken fern, Schreber's moss	Lambkill, leather-leaf, crowberry, Sphagnum moss	
Overstory Condition		Mature	Mature	Mature	Immature to mature	Immature	----	
Average Age		40-70 years	60-90 years	40-70 years	40-80 years	40-60 years	----	

Landscape 36(a) - Eastern Shore Drumlins (Tangier River)
Landscape 36(b) - Eastern Shore Drumlins (Moser River)

This unit consists of two sub-landscapes comprised of drumlin fields superimposed on an undulating plain and characterized by mixed forest types. Eastern Shore Drumlins (Tangier River) is 34, 708 hectare and Eastern Shore Drumlins (Moser River) is 37,901 hectare. Drainage is predominantly dendritic but is locally rectangular, and is defined by portions of several moderate-sized rivers and many lakes of various sizes.

Bedrock:

Major:	Cambrian/Ordovician greywacke	70%
	Cambrian/Ordovician slates	30%
Minor:		

Surficial Materials:

Major:	Stony till with silty till drumlins	70%
Minor:	Silty till with silty till drumlins	20%
	Glacially scoured bedrock with silty till drumlins	10%

Soils:

Major:	Liverpool (I)	45%
	Gibraltar (W)	40%
Minor:	Wolfville (W)	10%
	Others	5%

Hydrology:

Predominantly dendritic drainage; some rectangular drainage in western portion; portions of several moderate sized rivers; various sized lakes are common.

Landforms:

Imperfectly drained undulating terrain; well drained drumlins.

Coastal Environment:

N/A

Dominant Landscape Ecosystems

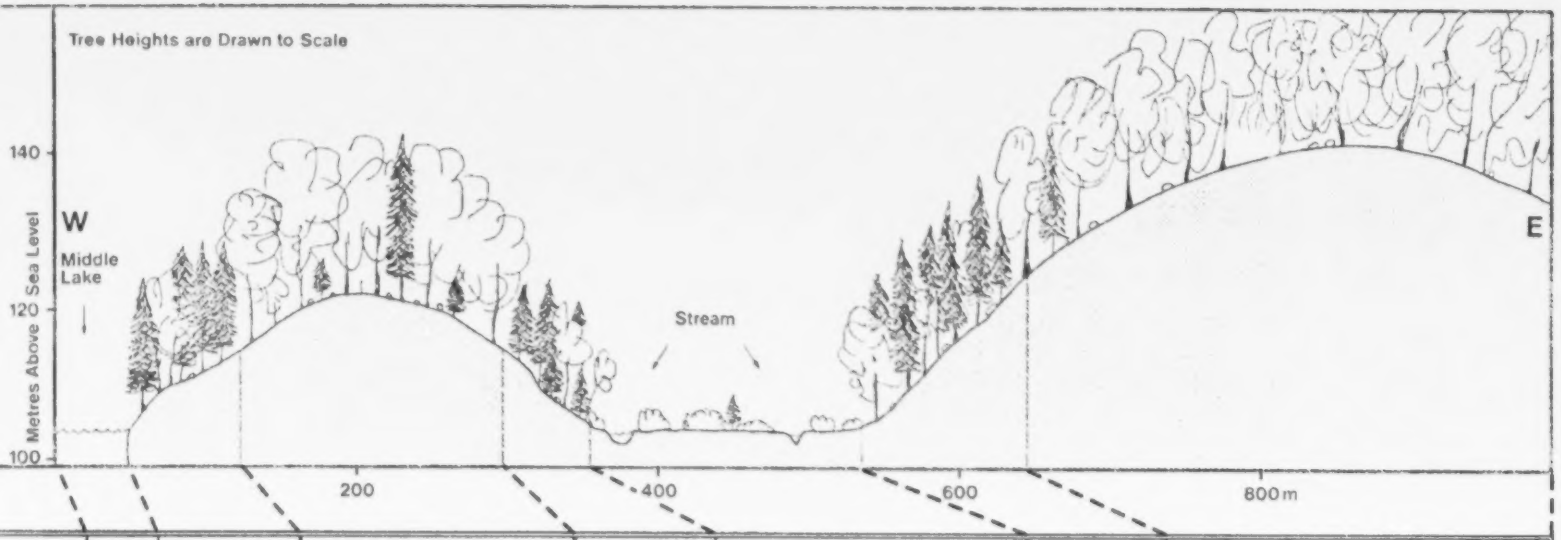
Imperfectly drained red spruce - black spruce (white pine) undulating terrain with patch/infrequent stand initiating natural disturbance regime;
Well drained sugar maple - yellow birch - American beech drumlins with gap natural disturbance regime.

BOGGY LAKE WILDERNESS AREA

Eastern Shore Drumlins (Moser River) Landscape

Middle Lake Transect

SCALE 100m



ECOSYSTEM	Lake	Well drained deciduous drumlin			Bog	Well drained deciduous drumlin	
Ecosystem Section		Lower slope	Upper slope/hilltop	Lower slope		Lower slope	Upper slope/hilltop

PHYSICAL

Landform	Lake	Lower slope	Upper slopes/hilltop	Lower slope	Depression	Lower slope	Upper slope/hilltop
Microtopography		Rocky	Rocky	Rocky	Hummocky	Boulders	Boulders
Drainage		Well drained	Well drained	Well drained	Poorly drained	Well drained	Well drained
Slope		5-15°	0-12°	10-15°	0°	5-15°	0-15°
Aspect		West	West/east	East		West	West and east

BIOLOGICAL

Overstory		rS+yB,bF	sM,yB+rS,rM	bF,rM	bS,La (scattered, small)	rS+rM	rM,yB,sM
Understory		rS,bF	sM+yB,rS	bF	----		rM,yB,+sM
Regeneration		bF	rM,bF,sM	bF,rM	----	rS,rM,bF	rM,yB+sM
Groundcover		Leaf litter	N.Y. fern, hay scented fern, wood sorrel	Leaf litter	Labrador tea, lambkill, Sphagnum moss, reindeer lichen	Mosses and leaf litter	Hay scented fern, goldthread
Overstory Condition		Immature	Immature-mature	Young	----	Young	Immature
Average Age		40-50 years	50-90 years	30-40 years	----	50 years	45-80 years

Landscape 37 - Eastern Shore Islands

A 35,882 hectare low, indented coastal landscape dominated by a rocky coastline and abundant islands and characterized by coastal boreal coniferous undulating terrain. Drainage is dendritic and parallel and is defined by the lower portions and estuaries of few major rivers and scattered small streams, as well as scattered, small to medium sized lakes.

Bedrock:

Major:	Cambrian/Ordovician greywacke	95%
Minor:	Cambrian/Ordovician slates	5%

Surficial Materials:

Major:	Stony till with scattered silty till drumlins	90%
Minor:	Glaciofluvial deposits	5%
	Glacially scoured bedrock	5%

Soils:

Major:	Gibraltar (W)	55%
	Liverpool (I)	40%
Minor:	Rockland (W)	5%

Hydrology:

Dendritic and parallel drainage, lower portions and estuaries of few major rivers; scattered small rivers; scattered small sized to medium sized lakes.

Landforms:

Well drained undulating terrain; islands.

Coastal Environment:

Indented, low coast with headlands and abundant, small to moderate sized islands; scattered, small saltmarshes.

Dominant Landscape Ecosystems:

Well drained white spruce - black spruce - balsam fir undulating terrain with patch/frequent stand initiating/infrequent stand initiating natural disturbance regime; Islands.

Landscape 38 - Guysborough Headlands

A 37,529 hectare landscape consisting of a series of major coastal headlands and harbours characterized by a variety of bedrock and rocky shores and coastal boreal coniferous undulating terrain. Drainage is dendritic and parallel and is defined by the lower portions and estuaries of few major rivers and scattered small streams, as well as scattered, small to medium sized lakes.

Bedrock:

Major:	Cambrian/Ordovician greywacke	90%
Minor:	Cambrian/Ordovician slates	10%

Surficial Materials:

Major:	Stony till	90%
Minor:	Glacially scoured bedrock	10%

Soils:

Major:	Liverpool (I)	70%
	Gibraltar (W)	25%
Minor:	Others	5%

Hydrology:

Dendritic and parallel drainage, lower portions and estuaries of a few major rivers; scattered small streams; scattered small to medium sized lakes.

Landforms:

Imperfectly drained undulating terrain.

Coastal Environment:

Indented, low coast with headlands and abundant harbours; few islands and scattered saltmarshes.

Dominant Landscape Ecosystems:

Imperfectly drained black spruce - larch (balsam fir, white spruce), undulating terrain with patch/infrequent stand initiating natural disturbance regime;
Harbours.

Landscape 39 - Canso Granite Barrens

A 53,097 hectare, low to moderate relief, generally rugged and fault controlled coastal unit dominated by extensive barrens and coastal boreal coniferous undulating terrain. The northern shore is bounded by the Chedabucto Fault and the southern shore is highly indented, with many islands. Drainage is predominantly rectangular with southeast and southwest flow, and is defined by several complete, small river watersheds and many, various sized lakes. The bedrock dominated coast is generally rugged, and is especially indented along the southern coast which includes many islands.

Bedrock:

Major:	Devonian/Carboniferous granites	70%
Minor:	Cambrian/Ordovician slates	15%
	Cambrian/Ordovician greywacke	15%

Surficial Materials:

Major:	Glacially scoured bedrock	50%
	Stony till	40%
Minor:	Hummocky ground moraine	10%

Soils:

Major:	Rockland (W)	35%
	Gibraltar (W)	30%
	Liverpool (I)	30%
Minor:	Others	5%

Hydrology:

Dendritic and rectangular drainage; several complete, small river watersheds; many various sized lakes.

Landforms:

Well drained undulating terrain.

Coastal Environment:

Low rugged, bedrock dominated coast; scattered islands and coves along the Chedabucto Bay shore; many islands, inlets and coves along the indented Atlantic coast.

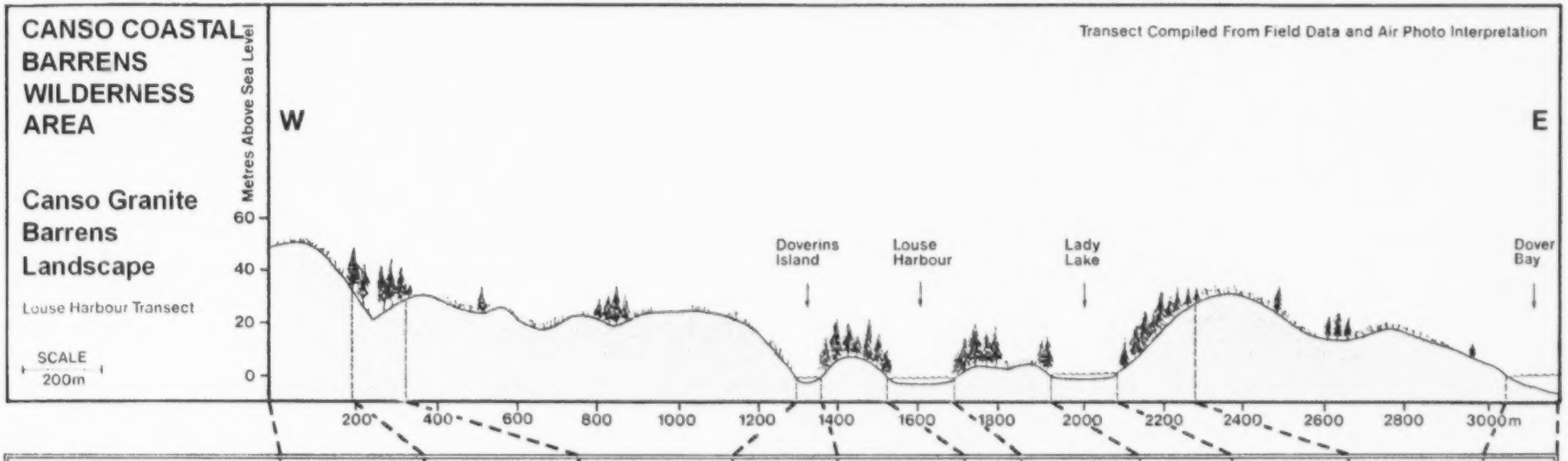
Dominant Landscape Ecosystems:

Barrens/semi-barrens;
Well drained white spruce - black spruce - balsam fir undulating terrain with patch/frequent stand initiating/infrequent stand initiating natural disturbance regime.

CANSO COASTAL BARRENS WILDERNESS AREA

Canso Granite Barrens Landscape

Louse Harbour Transect



ECOSYSTEM	Barren			Sheltered coastal waterbody	Island	SCW	Barren	Lake	Barren		Open water
Ecosystem Section	Barren	Coniferous Depression	Barren	(SCW)	Coniferous Undulations		Coniferous undulations	Brackish lake	Coniferous slope	Barren	

PHYSICAL

Landform	Undulating terrain	Fault-controlled depression	Undulating terrain		Island		Undulating terrain		Slope	Undulating terrain	
Microtopography	Rocky and outcrops	No data	Rocky and outcrops		No data		No data		Rocky and rock face	Rocky, some outcrop	
Drainage	Imperfectly to well drained	Imperfectly to well drained	Imperfectly to well drained		Well		Well		Well	Imperfectly to well dr.	
Slope	0-15°	10-25°	0-15°		0-10°		0-10°		10-25°	0-10°	
Aspect	West+east	West+east	West+east		West+east		West+east		West	East+west	

BIOLOGICAL

Overstory	Scattered bF,bS	bF,bS+rM	Scattered bF,bS		wS,bF		wS,bF		bF+bS,wS	Scattered, stunted wS,bF	
Understory	----	No data	----		No data		No data		bF		
Regeneration	----	No data	----		No data		No data		bS,bF		
Groundcover	(see barren to east)	No data	Black crowberry, common juniper, lambkill, crustose lichens		No data		No data		Lily-of-the-valley, bearberry, mosses	Black crowberry, common +creeping juniper	
Overstory Condition	----	No data	----		No data		No data		Mature		
Average Age	----	No data	----		No data		No data		50 years		

Landscape 40 - Aspen Drumlin Plain

This 25,714 hectare landscape is characterized by Acadian deciduous drumlins superimposed on undulating terrain with Acadian coniferous forest. Drainage is predominantly dendritic and features the upper reaches of various rivers and medium sized lakes.

Bedrock:

Major:	Early Carboniferous sandstones	90%
Minor:	Devonian/Carboniferous conglomerates	10%

Surficial Materials:

Major:	Silty till with silty till drumlins	50%
	Stony till with silty till drumlins	45%
Minor:	Alluvial deposits	5%

Soils:

Major:	Gibraltar (W)	70%
Minor:	Queens (I)	15%
	Barney (W)	10%
	Liverpool (I)	5%

Hydrology:

Predominantly dendritic drainage; upper reaches of various rivers; medium sized lakes are common.

Landforms:

Well drained undulating terrain; well drained drumlins.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Well drained red spruce (eastern hemlock, white pine), undulating terrain with patch/infrequent stand initiating natural disturbance regime;
Well drained sugar maple - yellow birch - American beech drumlins with gap natural disturbance regime.

Landscape 41 - St. Mary's Plain

A 77,815 hectare, down-faulted, elongated fault block characterized by Acadian coniferous rolling plain as well as a major barren complex. Drainage is predominantly parallel into the Pictou and St. Mary's rivers, and features many small headwater streams and scattered small lakes.

Bedrock:

Major:	Early Carboniferous sandstones	95%
Minor:	Cambrian/Ordovician greywacke	5%

Surficial Materials:

Major:	Stony till	50%
	Silty till	30%
Minor:	Glacially scoured bedrock	15%
	Other	5%

Soils:

Major:	Gibraltar (W)	75%
Minor:	Queens (I)	10%
	Barney (W)	10%
	Liverpool (I)	5%

Hydrology:

Predominantly parallel drainage of many small headwater streams into the Pictou and Saint Mary's Rivers; scattered, small lakes.

Landforms:

Well drained rolling terrain; Imperfectly drained flats.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Well drained red spruce - white pine (sugar maple, yellow birch) rolling terrain with patch/infrequent stand initiating natural disturbance regime;
Imperfectly drained black spruce - larch flats with patch/infrequent initiating natural disturbance regime.

Landscape 42 - Pictou River Hills

This is a 52,856 hectare, rolling landscape characterized by Acadian mixed forest hills and undulating terrain. Drainage is dendritic and consists, in the west, of the upper reaches of few large rivers and in the east, middle to lower reaches of some smaller rivers that drain into Northumberland Strait. Eastern areas include a low, erodible coastline.

Bedrock:

Major:	Early-late Carboniferous sandstones and carbonates	100%
Minor:		

Surficial Materials:

Major	Silty till	90%
Minor:	Glacially scored bedrock	5%
	Glaciofluvial deposits	5%

Soils:

Major:	Wolfville (W)	60%
Minor:	Tormentine (W)	15%
	Queens (I)	15%
	Others	10%

Hydrology:

Predominantly dendritic drainage; upper reaches of few large rivers (west); middle-lower reaches of some smaller rivers (east); no lakes.

Landforms:

Well drained hills; imperfectly drained undulating terrain.

Coastal Environment: (minor component)

Low, rock and till cliffs.

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech - red spruce (eastern hemlock, white pine) hills with gap natural disturbance regime;
Imperfectly drained black spruce - red spruce (white pine) undulating terrain with patch/infrequent stand initiating natural disturbance regime.

Landscape 43 - McArras Brook Dissected Hills

This 11,645 hectare landscape is defined by a set of low elevation, dissected foothills bounding the norther edge of the Pictou-Antigonish Hills landscape, and is characterized by Acadian mixwood hills and rolling terrain. Drainage is dendritic to parallel and includes major portions of small rivers. The coast consists of resistant cliffs.

Bedrock:

Major:	Hadrynian volcanic	30%
	Early Devonian siltstone	25%
Minor:	Silurian siltstone	20%
	Early Devonian conglomerate	10%
	Others	10%
	Early Devonian conglomerate	5%

Surficial Materials:

Major:	Glacially scoured bedrock	55%
Minor:	Stony till	15%
	Residuum	10%
	Silty till	10%
	Glaciofluvial deposits	5%
	Colluvial deposits	5%

Soils:

Major:	Cobequid (W)	35%
Minor:	Westbrook (W)	20%
	Wolfville (W)	20%
	Barney (W)	15%
	Queens (I)	10%

Hydrology:

Dendritic to parallel drainage; major portions of small rivers, including lower to middle sections; no lakes.

Landforms:

Well drained hills; well drained rolling terrain.

Coastal Environment:

Resistant, cliffed coast; no islands.

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech - red spruce (eastern hemlock) hills with gap natural disturbance regime;
Well drained red spruce (sugar maple, yellow birch, American beech) rolling terrain with patch/infrequent stand initiating natural disturbance regime.

Landscape 44(a) - Pictou-Antigonish Hills (Pictou)
Landscape 44(b) - Pictou-Antigonish Hills (Antigonish)

A resistant upland unit characterized by Acadian mixwood hills and undulating terrain, and divided into two sub-landscapes. Pictou-Antigonish Hills (Pictou) is 109,866 hectares and Pictou-Antigonish Hills (Antigonish) is 3,974 hectares. Drainage is parallel in the west and dendritic in the east, and is defined by headwaters of several moderate sized rivers.

Bedrock:

Major:	Hadrynian/Cambrian volcanic	80%
Minor:	Silurian siltstone	10%
	Devonian/Carboniferous granites	5%
	Devonian/Carboniferous sandstones	5%

Surficial Materials:

Major:	Stony till	40%
	Glacially scoured bedrock	25%
Minor:	Silty till	15%
	Residuum	10%
	Hummocky ground moraine	10%

Soils:

Major:	Cobequid (W)	85%
Minor:	Barney (W)	10%
	Gibraltar (W)	5%

Hydrology:

Drainage is predominantly parallel in the west and dendritic in the east, and includes headwaters of several moderate sized rivers; very few small lakes.

Landforms:

Well drained hills.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech - red spruce (eastern hemlock) hills with gap natural disturbance regime.

Landscape 45 - South River Low Hills

A broad, 100,528 hectare lowland draining into St. Georges Bay and characterized by Acadian mixed forest low hills and undulating terrain. Drainage is predominantly dendritic and is defined by major portions of several moderate sized rivers. A low relief, erodible coast features a variety of beach/shore types.

Bedrock:

Major:	Early-late Carboniferous sandstone and carbonates	75%
Minor:	Devonian/Carboniferous siltstone	20%
	Devonian/Carboniferous granite	5%

Surficial Materials:

Major:	Silty till	70%
Minor:	Stony till	10%
	Glaciofluvial deposits	10%
	Glacially scoured bedrock	5%
	Residuum	5%

Soils:

Major:	Wolfville (W)	50%
	Queens (I)	25%
Minor:	Tormentine (W)	10%
	Barney (W)	10%
	Gibraltar (W)	5%

Hydrology:

Predominantly dendritic drainage; major portions of several small to moderate sized rivers; very few lakes.

Landforms:

Well drained hills; imperfectly drained undulating terrain.

Coastal Environment:

Low till and rock cliffs; scattered spits and barriers; one island.

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech - red spruce hills with gap natural disturbance regime;
Imperfectly drained red spruce (eastern hemlock, white pine), undulating terrain with patch/infrequent stand initiating natural disturbance regime.

Landscape 46 - Mulgrave Hills

A 103,754 hectare, low hilly plateau characterized by Acadian mixed forest hills and undulating terrain. Drainage is predominantly dendritic and is defined by major portions of several moderate sized rivers and scattered to common, small to large lakes. The northern portion of the east facing coast is dominated by low rock and till cliffs (<20m) and a narrow, rocky shore, while other coastal areas feature low shore and extensive barrier beaches and lagoons.

Bedrock:

Major:	Devonian/Carboniferous conglomerate	80%
Minor:	Devonian volcanic	15%
	Other	5%

Surficial Materials:

Major:	Glacially scoured bedrock with silty till drumlins	45%
	Silty till	35%
Minor:	Stony till	15%
	Others	5%

Soils:

Major:	Liverpool (I)	25%
	Cobequid (W)	25%
	Queens (I)	25%
Minor:	Barney (W)	20%
	Others	5%

Hydrology:

Predominantly dendritic drainage; major portions of several moderate sized rivers; small sized to large sized lakes scattered.

Landforms:

Well drained hills; imperfectly drained undulating terrain.

Coastal Environment:

Low rock and till cliffs in northern areas, up to 20 m high; extensive barrier beaches and lagoons common elsewhere; very few islands.

Dominant Landscape Ecosystems:

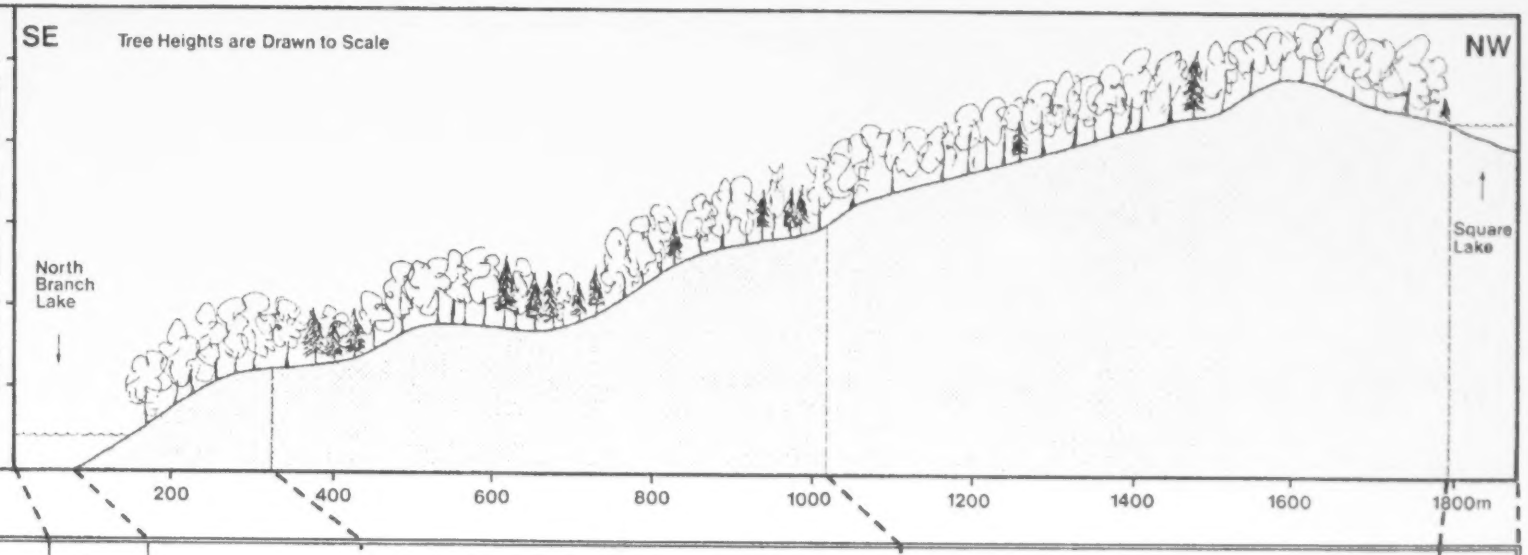
Well drained sugar maple - yellow birch - American beech hills with gap natural disturbance regime;
Imperfectly drained red spruce (eastern hemlock, white pine) undulating terrain with patch/infrequent stand initiating natural disturbance regime.

OGDEN ROUND LAKE WILDERNESS AREA

Mulgrave Hills Landscape

North Branch Lake to Square Lake Transect

SCALE 200m



ECOSYSTEM	Lake	Well drained rolling deciduous hill			Lake
Ecosystem Section		Deciduous slope	Mixed forest slope	Deciduous hilltop	

PHYSICAL

Landform	Lake	Lower slope	Mid slope	Upper slope and hilltop	Lake
Microtopography		Hummocky	Hummocky	Hummocky	
Drainage		Well drained	Imperfectly to well drained	Well drained	
Slope		10-15°	0-8°	0-8°	
Aspect		Southeast	South and southeast	Southeast/northwest	

BIOLOGICAL

Overstory		sM,rM+yB	yB,wS,rM+sM	sM,yB,rM+wS	
Understory		sM,rM+Be	rM+wS,sM	sM,rM+Be	
Regeneration		sM,rM	yB,wS,rM+sM	sM,rM	
Groundcover		Dewberry, clintonia	Lily-of-the-valley, wood fern	Lily-of-the-valley, wood sorrel, striped maple	
Overstory Condition		Young to mature	Young to immature	Young to mature	
Average Age		40-80 years	15-70 years	40-100 years	

Landscape 47 - Isle Madame Coastal Plain

A 22,066 hectare coastal landscape dominated by coastal boreal coniferous undulating to rolling terrain. Drainage is dendritic and locally parallel and is defined by many small rivers or portions thereof and by scattered lakes. The coast consists of many spits, barrier beaches and islands.

Bedrock:

Major:	Devon-Carboniferous sedimentary rocks	70%
Minor:	Late Carboniferous sedimentary rocks (may include limestone, coal	20%
	Early Carboniferous sedimentary rocks, including carbonates	5%
	Hadrynian volcanic, sedimentary & meta-sedimentary rocks	5%

Surficial Materials:

Major:	Silty till plain with a few silty till drumlins	45%
	Stony till plain with a few silty till drumlins	40%
Minor:	Glacially scoured bedrock	10%
	Other	5%

Soils:

Major:	Queens (I)	45%
	Cobequid (W)	45%
Minor:	Wolfville (W)	5%
	Kingsville (P)	5%

Hydrology:

Dendritic and locally parallel drainage; many small rivers and lower portions of small rivers and the lower reaches of one large river; also, scattered, various sized lakes.

Landforms:

Imperfectly drained undulating terrain; well drained rolling terrain.

Coastal Environment:

Low rock cliffs of variable resistance and low till cliffs; spits and barrier beaches common; islands are abundant.

Dominant Landscape Ecosystems:

Imperfectly drained white spruce - balsam fir - black spruce and undulating terrain with patch/infrequent stand initiating/frequent stand initiating natural disturbance regimes;
Well drained white spruce - balsam fir - red spruce rolling terrain with patch/infrequent stand initiating/frequent stand initiating natural disturbance regime.

Landscape 48 - Bras d'Or Lake Plain

An 89,985 hectare lowland landscape dominated by undulating terrain and hills characterized by Acadian mixed forest types. Drainage is dendritic and is primarily defined by many small to medium sized rivers, excluding many headwaters. The coastal environment consists of low rock and till cliffs or spits and barriers along Canso Strait, with the addition of large bays and many islands along Bras d'Or Lake.

Bedrock:

Major:	Early-late Carboniferous, non-resistant sedimentary rocks, including extensive carbonates	95%
Minor:	Other (granite, volcanic rocks, etc)	5%

Surficial Materials:

Major:	Silty till plain	45%
	Stony till plain and scattered till drumlins	45%
Minor:	Alluvial deposits	5%
	Glacially scoured bedrock	5%

Soils:

Major:	Queens (I)	75%
Minor:	Wolfville (W)	10%
	Kingsville (P)	10%
	Other (W)	5%

Hydrology:

Dendritic drainage; many small-medium rivers and one large river, typically excluding headwaters, and with drainage into Strait of Canso or Bras d'Or Lake; very few lakes in the north and scattered, various sized lakes in southern areas.

Landforms:

Imperfectly drained undulating terrain; well drained hills.

Coastal Environment:

St. George's Bay: low rock and till cliffs or spites and barriers, no islands;
Bras d'Or Lake: low rock and till cliffs, large bays and many islands; scattered barriers with spits.

Dominant Landscape Ecosystems:

Imperfectly drained white spruce - balsam fir - black spruce undulating terrain with patch/infrequent stand initiating/frequent stand initiating natural disturbance regime;
Well drained sugar maple - yellow birch - American beech - red spruce (eastern hemlock, white pine) hills with gap replacement natural disturbance regime.

Landscape 49 - Bras d'Or North Mountain Ridge

A 13,346 hectare, ridged upland landscape characterized by Acadian deciduous hills. Drainage is radial off the upland via high-gradient streams and few lakes.

Bedrock:

Major:	Hadrynian/Cambrian granitoid rocks	80%
Minor:	Early Carboniferous sedimentary rocks	10%
	Proterozoic meta-volcanic and sedimentary rocks	10%

Surficial Materials:

Major:	Glacially scoured bedrock	75%
Minor:	Colluvial deposits	15%
	Silty till plain	5%
	Stony till plain	5%

Soils:

Major:	Cobequid (W)	95%
Minor:	Queens (I)	5%

Hydrology:

Radial drainage off the upland; gradients are typically high; many headwater streams of small rivers; few small lakes.

Landforms:

Well drained hills.

Coastal Environment:

Low, non-resistant sedimentary rock cliffs and narrow shore, backed by upland; scattered, low islands.

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech (eastern hemlock) hills with gap replacement natural disturbance regime.

Landscape 50(a) - Bras d'Or Fault Ridges (Sporting Mountain)
Landscape 50(b) - Bras d'Or Fault Ridges (East Bay Hills)

A pair of ridged uplands characterized by Acadian mixed forest undulating terrain and hills. Bras d'Or Fault Ridges (Sporting Mountain) is 8,372 hectares and Bras d'Or Fault Ridges (East Bay Hills) is 27,657 hectares. Drainage is predominantly radial off the uplands via high gradient streams. Lakes are scattered and generally small, and the Bras d'Or Lake coast consists of low, unresistant bedrock cliffs and spits and barriers.

Bedrock:

Major:	Hadrynian volcanic and metamorphic sedimentary rocks	60%
	Hadrynian granitoid rocks	30%
Minor:	Early Carboniferous sedimentary rocks, including carbonates	10%

Surficial Materials:

Major:	Glacially scoured bedrock	60%
	Stony till plain with scattered silty till drumlin	30%
Minor:	Silty till plain	5%
	Other (glaciofluvial, colluvial, organic, alluvial)	5%

Soils:

Major:	Cobequid (W)	85%
Minor:	Aspotogan (P)	10%
	Other (W)	5%

Hydrology:

Radial drainage off the upland, locally parallel in the north; gradients are generally high; many complete streams and headwaters of small rivers; scattered small lakes throughout and few moderate sized lakes in the south.

Landforms:

Well drained undulating terrain, well drained slopes.

Coastal Environment:

Low unresistant bedrock cliffs, or spits and barriers, few islands. This coast is locally backed by high relief upland.

Dominant Landscape Ecosystems:

Well drained balsam fir (white spruce) undulating terrain with frequent stand initiating natural disturbance regime;
Well drained sugar maple - yellow birch - American beech slopes with gap natural disturbance regime.

Landscape 51 - Forchu Till Cliffs and Beaches

A 14,247 hectare coastal landscape dominated by coastal boreal coniferous flat terrain. Drainage is dendritic and typically internal, with small, complete streams and lower reaches of few small rivers. Various sized freshwater lakes occur scattered, and barachois lakes are common behind extensive barrier beaches. The coast is dominated by these barrier beaches and includes till cliffs and resistant, low rock cliffs, as well as scattered islands.

Bedrock:

Major:	Hadrynian volcanic and meta-sedimentary rocks	75%
	Hadrynian granitoid rocks	25%
Minor:		

Surficial Materials:

Major:	Stony till plain with silty till drumlins	75%
Minor:	Glacially scoured bedrock	10%
	Marine deposits	5%
	Silty till plain	5%
	Organic deposits	5%

Soils:

Major:	Liverpool (I)	50%
	Cobequid (W)	30%
Minor:	Gibraltar (W)	20%

Hydrology:

Dendritic, generally internal drainage; small complete streams and lower reaches of few small rivers; scattered, various sized lakes; locally common barachois (brackish water) lakes.

Landforms:

Imperfectly drained flats; beaches.

Coastal Environment:

Resistant, low rock cliffs, till cliffs, and extensive barrier beaches; scattered small to medium sized islands.

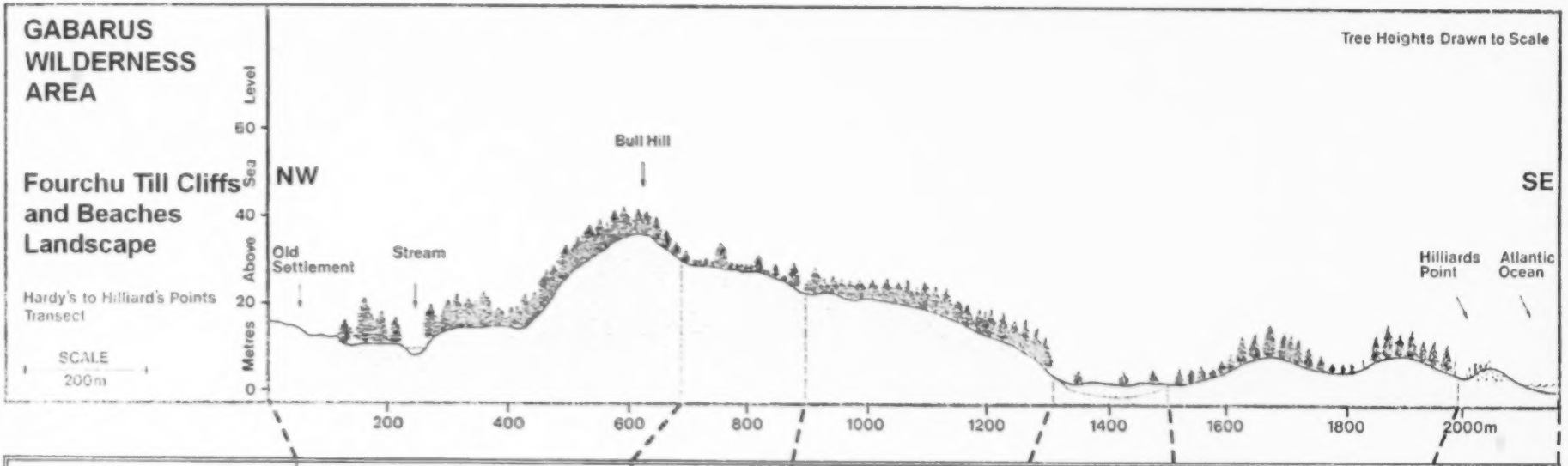
Dominant Landscape Ecosystems:

Imperfectly drained white spruce - balsam fir - black spruce flats with patch/infrequent stand initiating natural disturbance regime, beaches.

GABARUS WILDERNESS AREA

Fourchu Till Cliffs and Beaches Landscape

Hardy's to Hilliard's Points Transect



ECOSYSTEM	Well drained undulating coniferous terrain	Barren	Well drained undulating coniferous terrain	Bog	Well drained coniferous drumlinoid hills	Barrier beach

PHYSICAL

Landform	Hills and swales	Gentle slope	Gentle slope	Flat	Low drumlins	Beach
Microtopography	Hummocky	Hummocky	Hummocky	Low hummocks	Rocky	Cobbles
Drainage	Well drained	Well to imperfectly drained	Well to imperfectly drained	Imperfectly to poorly drained	Well drained	Well drained
Slope	0-20°	0-5°	0-5°	----	0-10°	----
Aspect	Northwest/southeast	Southeast	Southeast	----	Southeast	----

BIOLOGICAL

Overstory	bS,bF+wS at old settlement	bS, scattered and stunted	bF	----	bF+bS;wS at coastal fringe	----
Understory	bS,bF	----	----	----	bF;bF,wS at coastal fringe	----
Regeneration	bS,bF	bS	bF	----	bF,bS;wS at coastal fringe	----
Groundcover	Lambkill-Labrador tea	Reindeer lichen-Crowberry	Cinnamon fern, bunchberry	Beak rush-crowberry	Snowberry, twinflower	Beach grass, beach pea
Overstory Condition	Mature	----	Immature	----	Young	----
Average Age	70 years	----	40-70 years	----	15-40 years	----

Landscape 52 - Barren Hill Drumlins

This 39,061 hectare landscape consists of a drumlin field superimposed on an undulating plain, and is characterized by Acadian mixed forest types. Drainage is parallel and dendritic and is primarily defined by many small rivers and scattered to common, small-to-medium sized lakes. The Bras d'Or Lake coast is low and indented with many islands, coves and harbours.

Bedrock:

Major:	Devon-Carboniferous sedimentary rocks	50%
	Hadrynian volcanic and meta-sedimentary rocks	25%
Minor:	Early Carboniferous sedimentary rocks, including carbonates	15%
	Hadrynian granitoid rocks	10%

Surficial Materials:

Major:	Stony till plain with silty till plain drumlins	95%
Minor:	Other (alluvial, glacially scoured bedrock, organic)	5%

Soils:

Major:	Cobequid (W)	65%
Minor:	Wolfville (W)	15%
	Gibraltar (W)	10%
	Aspotogan (P)	5%
	Other (I)	5%

Hydrology:

Parallel and dendritic drainage; small rivers common; also one complete medium sized river; small lakes are scattered to common; one large lake.

Landforms:

Well drained drumlins; imperfectly drained undulating terrain.

Coastal Environment:

Low, non-resistant rock and till cliffs; islands, coves and harbours are common, forming a low, indented coast.

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech - white spruce - balsam fir drumlins with gap/patch natural disturbance regime;
Imperfectly drained white spruce - balsam fir undulating terrain with patch/frequent stand initiating natural disturbance regime.

Landscape 53 - Mira River Drumlin Plain

This 53,672 hectare landscape consists of an undulating plain with drumlins and is characterized by Acadian mixed forest types. Drainage is both dendritic and parallel and is defined by scattered lakes, including a few large lakes, and many waterways.

Bedrock:

Major:	Hadrynian volcanic and meta-sedimentary rocks	35%
	Early-Late Carboniferous sedimentary rocks, including carbonates	25%
Minor:	Hadrynian granitoid rocks	20%
	Early-Middle Cambrian sedimentary rocks	20%

Surficial Materials:

Major:	Stony till plain with silty till drumlins	70%
Minor:	Silty till plain with silty till drumlins	20%
	Organic deposits	5%
	Other (alluvial, bedrock)	5%

Soils:

Major:	Cobequid (W)	60%
Minor:	Gibraltar (W)	15%
	Liverpool (I)	10%
	Aspotogan (P)	5%
	Queens & Debert (I)	10%

Hydrology:

Parallel and dendritic drainage; many small streams and rivers and major portions of few moderate sized rivers; scattered, small-to-medium sized lakes and few large lakes.

Landforms:

Well drained undulating terrain; well drained drumlins.

Coastal Environment:

N/A.

Dominant Landscape Ecosystems:

Well drained white spruce - balsam fir undulating terrain with patch/frequent stand initiating natural disturbance regime;
Well drained sugar maple - yellow birch - American beech (white spruce - balsam fir) drumlins with gap/patch natural disturbance regime.

Landscape 54 - Mira River Hills and Ridges

This 25,921 hectare landscape is characterized by Acadian mixed forest rolling terrain and ridges. Drainage is predominantly parallel and is defined by abundant short rivers and streams, and scattered lakes.

Bedrock:

Major:	Early-Middle Cambrian sedimentary rocks	50%
	Early-Late Carboniferous sedimentary rocks, including carbonates.	25%
Minor:	Hadrynian volcanic and meta-sedimentary rocks	20%
	Other	5%

Surficial Materials:

Major:	Stony till plain with scattered drumlins	45%
	Silty till plain	45%
Minor:	Glaciofluvial deposits	10%

Soils:

Major:	Barney (W)	35%
	Cobequid (W)	30%
Minor:	Debert (I)	10%
	Gibraltar (W)	10%
	Liverpool (I)	5%
	Hebert (R)	5%

Hydrology:

Predominantly parallel drainage; abundant short rivers and streams; scattered, small to medium sized lakes.

Landforms:

Well drained rolling terrain; well drained ridges.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech rolling terrain with gap natural disturbance regime;
Well drained red spruce - white spruce - balsam fir (white pine) ridges with patch/infrequent stand initiating/frequent stand initiating natural disturbance regime.

Landscape 55 - Louisbourg Cliffs

A 14,292 hectare, low, coastal landscape dominated by coastal boreal coniferous undulating terrain and flats. Drainage is dendritic and predominantly internal and is defined by streams and small rivers, as well as scattered lakes. The coast is low, with rock cliffs and many small coves and harbours.

Bedrock:

Major:	Hadrynian volcanic and meta-sedimentary rocks	95%
Minor:	Hadrynian gabbro	5%

Surficial Materials:

Major:	Stony till plain with few silty till drumlins	50%
	Glacially scoured bedrock	45%
Minor:	Organic deposits	5%

Soils:

Major:	Cobequid (W)	45%
	Liverpool (I)	35%
Minor:	Aspotogan (P)	20%

Hydrology:

Dendritic, generally internal drainage; complete streams and rivers scattered throughout; scattered, small to medium sized lakes.

Landforms:

Imperfectly drained undulating terrain; poorly drained flats.

Coastal Environment:

Resistant, low to moderately high rock cliffs and many small coves and harbours; one large island, few small islands and scattered, small barrier beaches.

Dominant Landscape Ecosystems:

Imperfectly drained red spruce - white spruce - black spruce - balsam fir undulating terrain with patch/infrequent stand initiating/frequent stand initiating natural disturbance regime;
Poorly drained black spruce - larch flats with infrequent stand initiating natural disturbance regime.

Landscape 56 - Sydney Plain

A 116,761 hectare undulating plain characterized by Acadian coniferous and mixwood flats and undulating terrain. Drainage is predominantly dendritic with local radial and parallel patterns, and is defined by many streams and small to medium sized rivers. Various sized lakes are common locally, and the coast is dominated by unresistant rock cliffs and large bays and harbours.

Bedrock:

Major:	Early-Late Carboniferous sedimentary rocks, including coal and carbonates	90%
Minor:	Hadrynian volcanic and meta-sedimentary rocks	<5%
	Cambrian sedimentary	<5%

Surficial Materials:

Major:	Stony till plain with few silty till drumlins	55%
	Silty till plain	25%
Minor:	Glacially scoured bedrock	10%
	Glaciofluvial and alluvial	5%
	Organic deposits	5%

Soils:

Major:	Debert (I)	30%
	Gibraltar (W)	25%
Minor:	Cobequid (W)	15%
	Aspotogan (P)	15%
	Westbrook (W)	5%
	Other	10%

Hydrology:

Predominantly dendritic drainage, but variable with locally significant radial and parallel patterns, small to medium sized rivers and streams common, many with complete or nearly complete watersheds, various sized lakes locally common to locally absent.

Landforms:

Imperfectly poorly drained flats; well drained undulating terrain.

Coastal Environment:

Non-resistant rock cliffs, 5-20m high; medium to large bays and harbours, lower cliffs and fewer bays and harbours at Bras d'Or shore; occasional spits and barriers; few small islands.

Dominant Landscape Ecosystems:

Imperfectly to poorly drained white spruce - black spruce - balsam fir - larch flats with infrequent stand initiating/frequent stand initiating natural disturbance regime; Well drained black/red spruce - white spruce - balsam fir (sugar maple - yellow birch - American beech - white pine) undulating terrain with patch/infrequent stand initiating natural disturbance regime.

Landscape 57 - Boisdale Hills

A 37,284 hectare upland landscape dominated by Acadian mixed forest slopes and undulating terrain. Drainage is parallel or directly off the upland and is defined by many streams and small rivers. Scattered lakes occur in eastern areas, and the Bras d'Or Lake coast is dominated by low, non-resistant rock and till cliffs.

Bedrock:

Major:	Complex mix of Proterozoic-Cambrian volcanic, meta-volcanic, meta-sedimentary and granitoid rocks	90%
Minor:	Middle Devonian sedimentary rocks	5%
	Early Carboniferous sedimentary rocks, including carbonates	5%

Surficial Materials:

Major:	Glacially scoured bedrock	65%
Minor:	Stony till plain with few silty till drumlins	20%
	Colluvial deposits	5%
	Silty till plain	5%
	Other (organic, alluvial, glaciofluvial)	5%

Soils:

Major:	Cobequid (W)	80%
	Westbrook (W)	10%
Minor	Liverpool (I)	10%

Hydrology:

Parallel drainage in upland areas along southwest/northeast bedrock trends, generally via small rivers; also direct drainage off the upland via high gradient streams; streams and small rivers are common, many of which are complete; scattered, small to medium sized lakes occur in eastern areas.

Landforms:

Well drained slopes, imperfectly drained undulating terrain.

Coastal Environment:

Low, non-resistant rock and till cliffs; few islands and scattered barriers and spits along St. Andrews channel; islands and spits common along East Bay.

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech (eastern hemlock) slopes with gap natural disturbance regime;
Imperfectly drained white spruce - balsam fir undulating terrain with frequent stand initiating natural disturbance regime.

Landscape 58 - Skye River Hills and Valleys

A 64,841 hectare upland landscape characterized by Acadian deciduous hills and floodplains. Drainage is dendritic and is defined by various portions of many streams and small to medium sized rivers and very few lakes. A short coastal stretch at St. George's Bay is dominated by low relief till and rock cliffs.

Bedrock:

Major:	Early Carboniferous sedimentary rocks, including carbonates	75%
Minor:	Proterozoic/Hadrynian complex of granitoid and meta-sedimentary and meta-volcanic rocks	20%

Surficial Materials:

Major:	Glacially scoured bedrock	40%
	Colluvial deposits	25%
Minor:	Stony till plain	15%
	Silty till plain	10%
	Other (alluvial, residuum, glaciofluvial)	10%

Soils:

Major:	Cobequid (W)	40%
	Westbrook (W)	25%
Minor:	Queens (I)	20%
	Wolfville (W)	10%
	Other (R,W)	5%

Hydrology:

Dendritic drainage; various portion of many streams and small to medium sized rivers, with gradients varying from moderate to high; very few lakes (one small and one medium sized lake); also, this landscape partially surrounds Lake Ainslie.

Landforms:

Well drained hills; well drained floodplains.

Coastal Environment:

The coast is a minor element of this landscape. It consists of low, non-resistant rock and till cliffs, with narrow, mixed sand to gravel beaches and no islands.

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech hills with gap natural disturbance regime;
Well drained sugar maple - American elm - balsam poplar floodplains with gap natural disturbance regime.

Landscape 59 - Judique Plain and Hills

This 40,807 hectare coastal plain and hills landscape is characterized by Acadian coniferous and mixed woods undulating and rolling terrain. Drainage is dendritic and locally parallel and is defined by various portions of small- to medium-sized rivers and very few lakes. The coast is dominated by low rock and till cliffs.

Bedrock:

Major:	Early-Late Carboniferous, mainly non-resistant sedimentary rocks, including local coal and carbonates	85%
Minor:	Hadrynian granitoid rocks	5%

Surficial Materials:

Major:	Silty till plain	40%
	Stony till plain	40%
Minor:	Glacially scoured bedrock	5%
	Glaciofluvial	5%
	Other (marine, organic)	5%

Soils:

Major:	Queens (I)	40%
	Cobequid (W)	35%
Minor:	Wolfville (W)	15%
	Kingsville (P)	5%
	Gibraltar (W)	5%

Hydrology:

Predominantly dendritic drainage but locally parallel; various portions of small- to medium-sized, north to northwest draining rivers, including major portions of several medium-sized rivers and associated estuaries; very few lakes.

Landforms:

Imperfectly drained undulating terrain; well drained rolling terrain.

Coastal Environment:

Low, non-resistant rock and till cliffs with spits and barriers locally; several protected harbours and several islands.

Dominant Landscape Ecosystems:

Imperfectly drained white spruce - red spruce - black spruce - balsam fir undulating terrain with patch/infrequent stand initiating/frequent stand initiating natural disturbance regime; Well drained sugar maple - yellow birch - American beech - red spruce rolling terrain with gap natural disturbance regime.

Landscape 60 - Mabou Hills

This 10,592 hectare upland landscape is characterized by Acadian deciduous hills with radial drainage off the upland via short, high gradient streams. The coast consists of mainly resistant rock cliffs.

Bedrock:

Major:	Proterozoic meta-volcanic and granitoid rocks	75%
Minor:	Devono-Carboniferous volcanic and sedimentary rocks	15%
	Early-Late Carboniferous mainly sedimentary rocks, including local coal	10%

Surficial Materials:

Major:	Colluvial deposits	80%
Minor:	Residuum and glacially scoured bedrock	10%
	Glaciofluvial	5%
	Silty till plain	5%

Soils:

Major:	Cobequid (W)	95%
Minor:	Canning (R)	5%

Hydrology:

Radial drainage off the upland via short, high gradient streams, including direct drainage into the Gulf of St. Lawrence; no lakes.

Landforms:

Well drained hills.

Coastal Environment:

Mainly resistant rock cliffs, 5-30m in height or more, backed by the upland; coarse grained beaches absent or narrow; no islands or harbours.

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech hills with gap natural disturbance regime.

Landscape 61 (a) - Western Cape Breton Coastal Plain (Inverness)
Landscape 61 (b) - Western Cape Breton Coastal Plain (Cheticamp)

This two part lowland landscape is characterized by Acadian mixwood undulating terrain. The Inverness portion is 4,036 hectares and the Cheticamp portion is 7,463 hectares. Drainage is parallel and is defined by lower portions of streams, short rivers and the mouth of Margaree River, as well as a few medium sized lakes. The coast is dominated by low to moderate (<10 m), non-resistant rock cliffs.

Bedrock:

Major:	Early-Late Carboniferous sedimentary rocks, including carbonates and coal	95%
Minor:	Hadrynian granitoid rocks	5%

Surficial Materials:

Major:	Glaciofluvial	45%
	Silty till	25%
Minor	Stony till	15%
	Alluvial	5%
	Glacially scoured bedrock	5%
	Marine	5%

Soils:

Major:	Queens (I)	35%
Minor:	Canning (R)	15%
	Hebert (R)	15%
	Gibraltar (W)	10%
	Debert (I)	10%
	Westbrook (W)	5%
	Tormentine (W)	5%
	Rough Mountain Land (W)	5%

Hydrology:

Parallel drainage off adjacent uplands, across this landscape and into the Gulf of St. Lawrence; drainage is defined by lower portions of streams and short rivers and the mouth of the Margaree River; few, generally medium sized lakes.

Landforms:

Well drained undulating terrain; imperfectly drained undulating terrain.

Coastal Environment:

Low, mainly resistant sedimentary rock cliffs, generally <5m; one large island and several harbours, nearly closed off by barriers.

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - white spruce - balsam fir (white pine) undulating terrain with gap/patch/frequent stand initiating natural disturbance regime; Imperfectly drained white spruce - black spruce - balsam fir - larch undulating terrain with patch/frequent stand initiating natural disturbance regime.

Landscape 62 - Masons Mountain

This 8543 hectare upland landscape is characterized by Acadian deciduous hills, with radial drainage off the upland via high gradient streams.

Bedrock:

Major:	Early-late Carboniferous sedimentary rocks, including carbonates	100%
Minor:		

Surficial Materials:

Major:	Glacially scoured bedrock	50%
	Colluvial deposits	40%
Minor:	Stony till	5%
	Other (alluvial, silty till)	5%

Soils:

Major:	Cobequid (W)	95%
Minor:	Other (I,W)	5%

Hydrology:

Radial drainage off the upland via high gradient headwater streams, draining into river systems of adjacent landscape; no lakes.

Landforms:

Well drained hills.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech hills with gap natural disturbance regime.

Landscape 63 - Keppoch Mountain

This 47,705 hectare upland landscape is characterized by Acadian deciduous slopes and mixwood undulating terrain. Drainage occurs in radial fashion off the upland, via high gradient streams.

Bedrock:

Major:	Early-late Carboniferous sedimentary rocks, including local carbonates	75%
Minor:	Devono-Carboniferous volcanic and sedimentary rocks	10%
	Hadrynian granitoid rocks	10%
	Other	5%

Surficial Materials:

Major:	Glacially scoured bedrock	55%
	Colluvial	25%
Minor:	Stony till	10%
	Residuum	5%
	Other (alluvial, glaciofluvial, silty till)	5%

Soils:

Major:	Rough Mountain Land (W)	85%
Minor:	Westbrook (W)	10%
	Queens (I)	5%

Hydrology:

Drainage occurs in radial fashion, off the upland, via generally high gradient dendritic streams and small rivers; very few, small lakes.

Landforms:

Well drained undulating terrain; well drained slopes.

Coastal Environment:

N/A

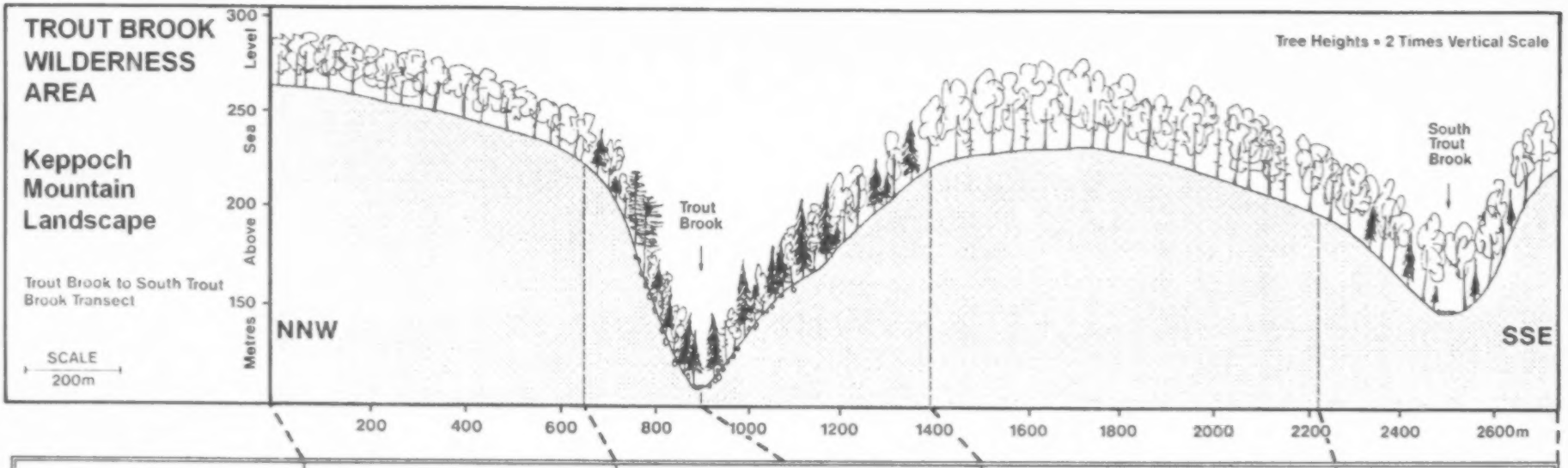
Dominant Landscape Ecosystems:

Well drained yellow birch - balsam fir undulating terrain with infrequent stand initiating/frequent stand initiating natural disturbance regime;
Well drained sugar maple - yellow birch - American beech slopes with gap natural disturbance regime.

TROUT BROOK WILDERNESS AREA

Keppoch Mountain Landscape

Trout Brook to South Trout Brook Transect



ECOSYSTEM	Well drained mixedwood gentle slope	Well drained mixed forest canyon		Well drained mixed-wood gentle slope	Well drained mixed forest canyon
Ecosystem Section	Deciduous gently slope	Mixed forest slope	Coniferous slope	Mixedwood gentle slope	Deciduous canyon

PHYSICAL

Landform	Hilltop	Canyon slope	Canyon slope	Hilltop	Canyon
Microtopography	Hummocky	Bouldery	Rocky	Hummocky	Locally hummocky
Drainage	Well to imperfectly drained	Well drained	Well drained	Well drained	Well drained
Slope	0-10°	0-50°;30° average	0-50°; 30° average	0-10°	0-40°; 20° average
Aspect	South-southwest	Northeast	Southwest	West	South and north

BIOLOGICAL

Overstory	yB,rM,wB,sM	rS,yB,wB+eH	rS,bF+yB,rM,dead bF	yB,bF,rM +dead bF	yB,sM,Be,rM+bF
Understory	rM,wB	rS,yB,wB+eH	rS,bF+yB,wB,rM,MtA	bF,rS+sM,Be,yB,wS	Be,sM,yB+bF
Regneration	rM,wB	rS,bF,yB,wB+eH	rS,bF,rM, StM	bF,yB,sM,rS,rM,Be	yB,sM,rM+bF,Be,StM,MtM
Groundcover	Wood fern, sarsaparilla, dewberry	Wood fern, mosses	Mosses, snowberry, clintonia	Woodfern, bunchberry, starflower	Wood fern, wood sorrel + cow parsnip
Overstory Condition	Immature to mature	Mature-mature old growth	Mature	Mature to immature old growth	Mature to immature old growth
Average Age	50-100 years	70-225 years	60-90 years	70-100+ years	70-100+ years

Landscape 64 (a) Cape Breton Boreal Plateau (Gillanders Mountain)
Landscape 64 (b) - Cape Breton Boreal Plateau (Central)
Landscape 64 (c) - Cape Breton Boreal Plateau (Francey Mountain)

A highland landscape, divided into three sub-landscapes, and characterized by boreal coniferous undulating terrain. Cape Breton Boreal Plateau (Gilanders Mountain) is 3,038 hectares, Cape Breton Boreal Plateau (Central) is 178,684 hectares and Cape Breton Boreal Plateau (Francey Mountain) is 1,783 hectares. Drainage is dendritic and defined by low to medium gradient streams. Lakes are uncommon to scattered, except common locally.

Bedrock:

Major:	Proterozoic/Hadrynian complex of meta-volcanic and meta-sedimentary rocks	75%
	Hadrynian granitoid rocks (diorite, granite, syenite, etc.)	25%
Minor:		

Surficial Materials:

Major:	Residuum	30%
	Glacially scoured bedrock	30%
Minor:	Stony till	20%
	Silty till	5%
	Alluvial and glaciofluvial	5%
	Organic	5%
	Colluvial	5%

Soils:

Major:	Rough mountain land (W)	100%

Hydrology:

Dendritic drainage throughout, via low to medium gradient headwater portions of many small to large rivers; small to medium sized lakes uncommon to scattered, except common locally; existing large lakes are flowage.

Landforms:

Well drained undulating terrain.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

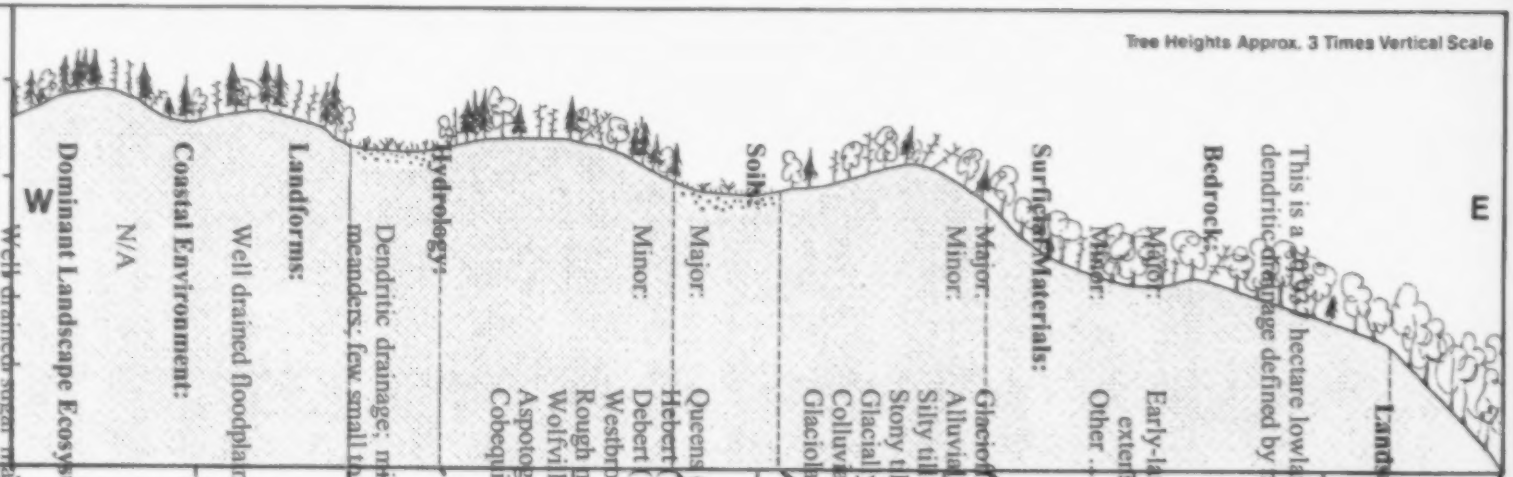
Well drained balsam fir undulating terrain with frequent stand initiating/stand maintaining natural disturbance regime.

FRENCH RIVER WILDERNESS AREA

Cape Breton Boreal Plateau Landscape

MacAskill Brook Transect

SCALE 100m



ECOSYSTEM	Well drained, gently undulating coniferous terrain						
Ecosystem Section	Coniferous hill	Fen	Coniferous hill	Fen	Mixedwood hill	Mixedwood slope	Eastern Coast
PHYSICAL							
Landform	Undulating hill	Swale	Hill	Swale	Hill	Undulating sideslope	Steep Slopes
Microtopography	Hummocky	Some hummocks	Hummocky	Some hummocks	Hummocky	Hummocky	Landscape
Drainage	Well drained	Poorly drained	Well-moderately drained	Poorly drained	Well drained	Well drained	
Slope	0-30°	0°	0-20°	0°	0-25°	0-30°	
Aspect	East/West	----	East/West	----	East/West	East	
BIOLOGICAL							
Overstory	bS,wB,dead bF	bS,La at edge	bS,wB,dead bF	bS,La,rM at edge	wB,dead bF+bS	YB,wB,dead bF	
Understory	bS,bF,wB	----	bS+wB	----	wB,bS,bF,M+A	wB,M+A,pC,bF	
Regeneration	bS,bF,wB	----	bS,bF,wB 5% 10% 10% 25% 35%	---- 5% local	bF,wB 15% 20% 30%	bF,wB,wS+yB <5% 5% 8%	
Groundcover	Bracken fern, blue-berry, Schreber's moss	Beak-rush, Sph. moss	Lambkill, bracken fern, bunchberry	Beak-rush, Sph. moss	Raspberry, bunchberry	Raspberry, bracken fern, bunchberry	
Overstory Condition	Young to mature	----	Young to mature	----	Young to mature	Young to mature	
Average Age	70 years	----	70 years	----	60 years	60 years	

Well drained sugar maple - American elm - balsam poplar floodplains with gap natural disturbance regime.

Dendritic drainage; middle to lower reaches of two major rivers; few small to medium size lakes scattered locally

Queens (H) Hebert (R) Debert (I) Major:
Westbrook (W) Rough Mountain (W) Wolfville (W) Aspotogan (R) Cobequid (W) Minor:
Glaciofluvial Alluvial Silty till Stony till Glacially scoured bedrock Colluvial Glaciolacustrine Major: Minor:
Early-late Carboniferous sedimentary rocks, including extensive carbonates.
Other

Landscape 65 - Margaree Middle River Valleys

This is a 20,937 hectare lowland landscape characterized by Acadian deciduous floodplains, with dendritic drainage defined by middle to lower reaches of two major rivers and few lakes.

Bedrock:

Major:	Early-late Carboniferous sedimentary rocks, including extensive carbonates	>98%
Minor:	Other	<2%

Surficial Materials:

Major:	Glaciofluvial	30%
Minor:	Alluvial	20%
	Silty till	20%
	Stony till	15%
	Glacially scoured bedrock	5%
	Colluvial	5%
	Glaciolacustrine	local

Soils:

Major:	Queens (I)	35%
	Hebert (R)	25%
Minor:	Debert (I)	10%
	Westbrook (W)	10%
	Rough mountain land (W)	5%
	Wolfville (W)	5%
	Aspotogan (P)	5%
	Cobequid (W)	5%

Hydrology:

Dendritic drainage; middle to lower reaches of two large rivers, including local meanders; few small to medium sized lakes scattered locally.

Landforms:

Well drained floodplains.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Well drained sugar maple - American elm - balsam poplar floodplains with gap natural disturbance regime.

Landscape 66 - Dunvegan Fluted Hills

This is a hilly, 9,942 hectare landscape, characterized by Acadian mixed forest hills and undulating terrain. Drainage is radial off the upland via high gradient streams. The coast is dominated by low to moderately high rock cliffs.

Bedrock:

Major:	Early-late Carboniferous, relatively non-resistant sedimentary rocks	100%
Minor		

Surficial Materials:

Major:	Glacially scoured bedrock	40%
	Colluvial	25%
Minor:	Stony till plain	15%
	Silty till plain	15%
	Alluvial and glaciofluvial	5%

Soils:

Major:	Gibraltar (W)	85%
Minor:	Queens (I)	10%
	Wolfville (W)	5%

Hydrology:

Radial drainage off the upland (hills) via many high gradient headwater streams, including direct drainage into Northumberland Strait; no lakes.

Landforms:

Well drained hills; imperfectly drained undulating terrain.

Coastal Environment:

Low to moderately high, non-resistant rock cliffs; relatively straight shore with narrow, sand to cobble beaches; one large island and several small, bedrock-controlled points and associated small beaches.

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech hills with gap natural disturbance regime;
Imperfectly drained red spruce/black spruce - balsam fir - larch undulating terrain with patch/infrequent stand initiating/frequent stand initiating natural disturbance regime.

Landscape 67 - Squirrel Mountain Foothills

This 11,956 hectare hills landscape is characterized by Acadian mixed forest hills and undulating terrain. Drainage is dendritic in the interior and radial around the margins of the upland, and is primarily defined by many, relatively high gradient streams.

Bedrock:

Major:	Early Carboniferous sedimentary rocks, including carbonates	85%
Minor:	Devono-Carboniferous volcanic and sedimentary rocks	15%

Surficial Materials:

Major:	Glacially scoured bedrock	40%
	Colluvial	35%
Minor:	Residuum	10%
	Silty till plain	10%
	Alluvial and glaciofluvial	5%

Soils:

Major:	Rough mountain land (W)	95%
Minor:	Gibraltar (W)	5%

Hydrology:

Radial drainage around margins of the upland, with dendritic drainage in the interior; many short, high gradient headwater streams and one small, high gradient river; no lakes.

Landforms:

Well drained hills; well drained undulating terrain.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech hills with gap natural disturbance regime;
Well drained balsam fir - white spruce - black spruce undulating terrain with patch/infrequent stand initiating/frequent stand initiating natural disturbance regime.

Landscape 68 - Interior Steep Slopes

This 21,478 hectare highland landscape is dominated by Acadian deciduous slopes and canyons. Drainage is dendritic and is defined by many high gradient streams and mid-sections of small rivers.

Bedrock:

Major:	Complex mix of Proterozoic meta-volcanic, meta-sedimentary and plutonic rocks	80%
Minor:	Early Carboniferous sedimentary rocks (generally on lower slopes)	15%
	Other	5%

Surficial Materials:

Major:	Colluvial deposits	90%
Minor:	Other (glacially scoured bedrock, residuum, silty and stony Till, alluvial)	10%

Soils:

Major:	Rough mountain land (W)	95%
Minor:	Other (I and W)	5%

Hydrology:

Dendritic drainage, via many high gradient headwater streams and high gradient mid-sections of small rivers; no lakes.

Landforms:

Well drained slopes; well drained canyons.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

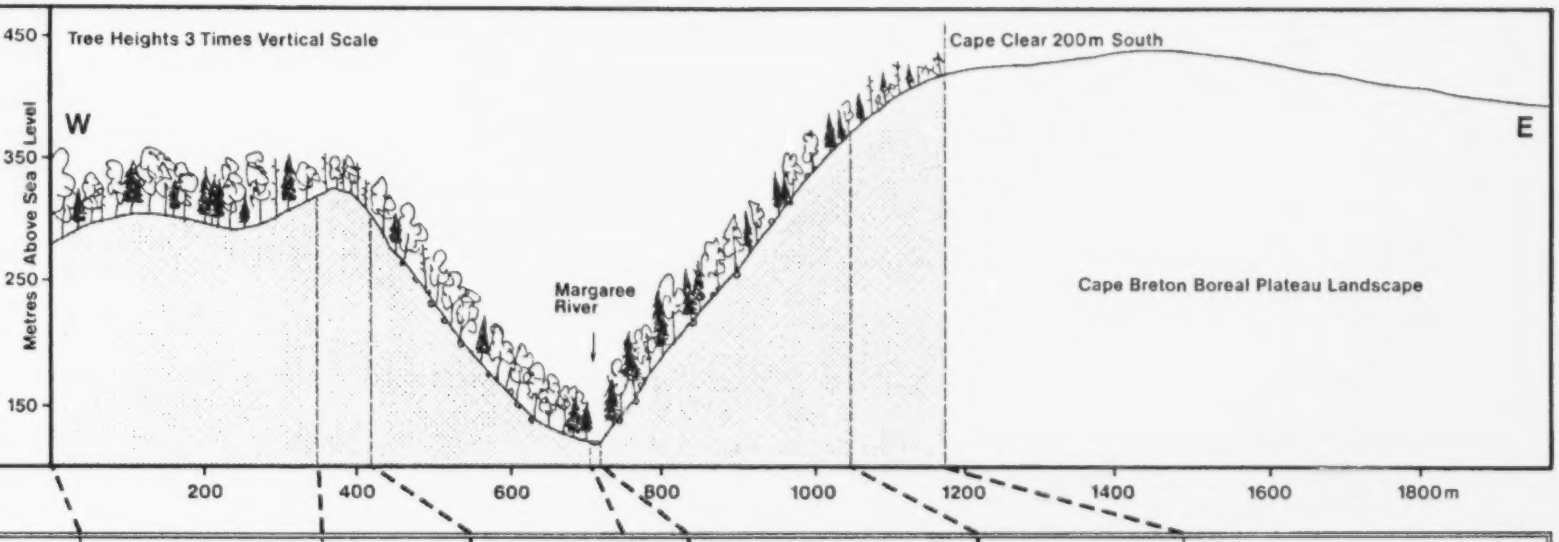
Well drained sugar maple - yellow birch - American beech slopes with gap natural disturbance regime;
Well drained sugar maple - yellow birch - American beech - balsam fir - white spruce canyons with gap natural disturbance regime.

MARGAREE RIVER WILDERNESS AREA

Interior Steep Slopes Landscape

Cape Clear Transect

SCALE 200m



ECOSYSTEM	Well drained mixedwood canyon	Well drained deciduous dominated mixedwood canyon					
Ecosystem Section	Mid-upper slope	Hilltop	Steep slope	River	Steep slope	Upper slope	

PHYSICAL

Landform	Slope (view across)	Hilltop	Steep slope	Steep slope	Upper slope	
Microtopography	Some hummocks	Hummocky, rocky	Bouldery and local outcrops	Scattered boulders	Hummocky	
Drainage	Well drained	Well drained	Well drained	Well drained	Well drained	
Slope	35-45°	0-35°	15-55°	40-55°	10-45°	
Aspect	South	All directions	East	West	West	

BIOLOGICAL

Overstory	rM,bF,wB,dead Bf+yB,wS	dead bF+rM,yB	yB,sM+bF,wS	yB,bF,wS	bF,wS,abundant dead bF	
Understory	rM,bF,wS	yB,rM	rM,sM,bF,wB	yB,bF	bF,rM,yB	
Regneration	rM,yB,bF,wS	bF,rM	rM,bF,sM	yB,bF,rM	yB,rM,bF	
Groundcover	Wood fern, bunchberry	Bracken, raspberry	Wood fern, wood aster, stair-step moss	Wood fern, clintonia, bunchberry	Hay-scented fern, bunchberry, mosses	
Overstory Condition	Young to mature	Young	Immature to mature	Immature to mature	Young	
Average Age	35-80 years	10-40 years	40-100 years	40-80 years	10-40 years	

Landscape 69 - Central Cape Breton Hills

This 43,942 hectare hills landscape is characterized by Acadian mixed forest hills and undulating terrain. A mix of dendritic and parallel drainage is defined by a high variety of waterways and few lakes. The Bras d'Or Lake coast is dominated by low rock and till cliffs with a variety of other coastal landforms.

Bedrock:

Major:	Early Carboniferous sedimentary rocks, including local carbonate ...	90%
Minor:	Proterozoic metamorphic rocks	5%
	Devono-Carboniferous or Hadrynian granitoid rocks	5%

Surficial Materials:

Major:	Silty till plain	35%
	Stony till plain and few silty till drumlins	35%
	Glacially scoured bedrock	25%
Minor:	Alluvial	5%

Soils:

Major:	Westbrook (W)	45%
	Queens (I)	30%
Minor:	Rough mountain land (W)	15%
	Wolfville (W)	5%
	Debert (I).....	5%

Hydrology:

Mix of dendritic and parallel (northeast/southwest trending) drainage; high variety of waterways, including many streams and small rivers, as well as middle to lower reaches of several large rivers; few lakes; borders parts of Bras d'Or Lake and St. Anns Bay.

Landforms:

Well drained hills; imperfectly drained undulating terrain.

Coastal Environment:

Low rock and till cliffs, locally bounded by major slopes or hills; scattered barrier beaches and spits; several bays and harbours; and few islands.

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech (white spruce, white pine) hills with gap natural disturbance regime;
Imperfectly drained white spruce - red/black spruce - balsam fir undulating terrain with patch/infrequent stand initiating/frequent stand initiating natural disturbance regime.

Landscape 70 - Kellys Mountain

This 11,450 hectare upland landscape is characterized by Acadian mixwood slopes and undulating terrain, and boreal coniferous undulating terrain. Drainage is primarily radial and is generally defined by high gradient streams or small rivers and scattered lakes. The coast is dominated by resistant and non-resistant bedrock cliffs.

Bedrock:

Major:	Hadrynian/Cambrian granite and other granitoid rocks	60%
	Proterozoic meta-volcanic and meta-sedimentary rocks	30%
Minor:	Early-late Carboniferous sedimentary rocks, including local carbonate	10%

Surficial Materials:

Major:	Glacially scoured bedrock	70%
Minor:	Colluvial	10%
	Silty till plain	10%
	Stony till plain	5%
	Glaciofluvial	5%
	Organic	local

Soils:

Major:	Cobequid (W)	95%
Minor:	Westbrook (W)	5%

Hydrology:

Radial drainage off the upland, superimposed with a weak preference for northeast/southwest oriented parallel drainage; generally high gradient streams or small rivers; scattered, small to medium sized lakes.

Landforms:

Well drained slopes; well drained undulating terrain.

Coastal Environment:

Narrow shore, generally bounded by low to high, resistant and non-resistant bedrock cliffs, 5-50+m, and moderate to steeply sloping upland; scattered small barrier beaches and a cuspate spit; several islands offshore (Bird Islands).

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech slopes with gap natural disturbance regime.
Well drained balsam fir undulating terrain with frequent stand initiating natural disturbance regime.

Landscape 71 - Eastern Coast Steep Slopes

This 25,658 hectare highland landscape is characterized by Acadian deciduous canyons and undulating terrain. Drainage is dendritic and is defined by many high gradient streams and rivers and few lakes. The coast is dominated by low to high cliffs.

Bedrock:

Major:	Proterozoic-Cambrian plutonic rocks	60%
	Proterozoic meta-volcanic and meta-sedimentary rocks	25%
Minor:	Devono-Carboniferous volcanic and sedimentary rocks	5%
	Early Carboniferous and sedimentary rocks	5%
	Other	5%

Surficial Materials:

Major:	Colluvial	60%
Minor:	Glacially scoured bedrock	15%
	Glaciofluvial	10%
	Stony till plain	10%
	Silty till plain	5%
	Alluvial	local

Soils:

Major:	Rough mountain land (W)	80%
Minor:	Gibraltar (W)	20%

Hydrology:

Dendritic drainage via many high gradient headwater streams and various, generally high gradient sections of small to medium sized rivers; drainage to Gulf of St. Lawrence; few small to medium sized lakes in norther parts.

Landforms:

Well drained canyons; well drained undulating terrain.

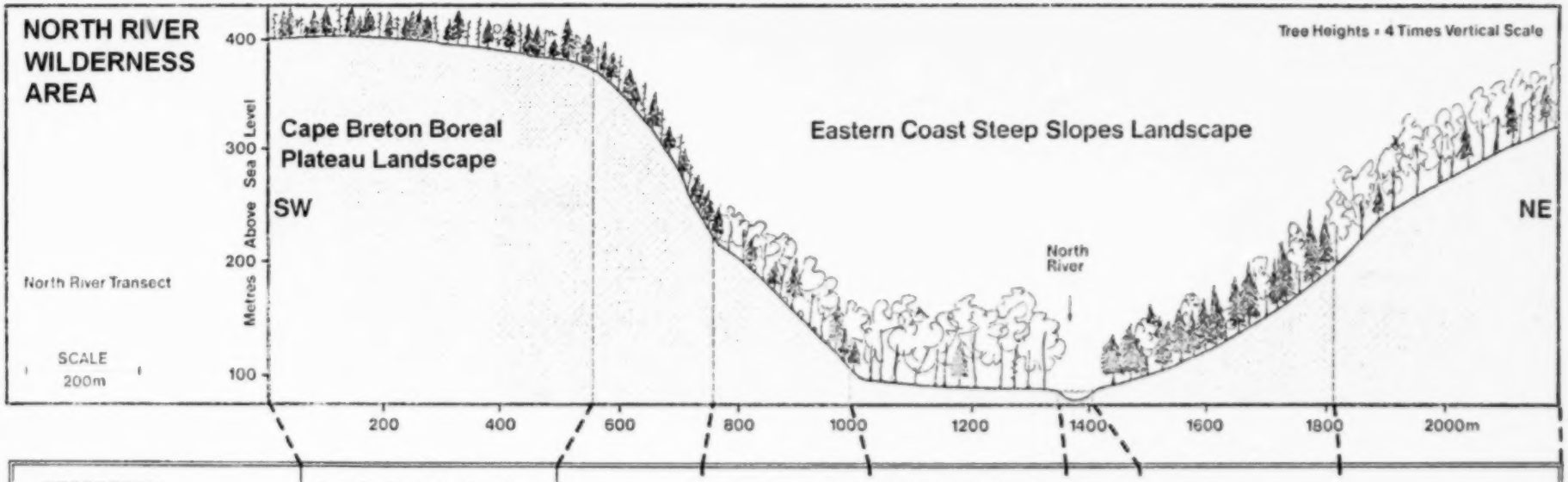
Coastal Environment:

Generally non-resistant, low to high cliffs, <5-200+m and straight, narrow, coarse sediment shore; several barrier beaches and spits and no islands.

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech canyons with gap natural disturbance regime;
Well drained sugar maple - yellow birch - American beech (red spruce, eastern hemlock, white pine, red oak) undulating terrain with gap/patch natural disturbance regime.

NORTH RIVER WILDERNESS AREA



ECOSYSTEM	Imperfectly drained gently undulating coniferous terrain	Well drained mixed forest canyon					
Ecosystem Section	Undulating coniferous terrain	Coniferous upper slope	Deciduous lower slope	Deciduous floodplain	River	Coniferous lower slope	Deciduous upper slope + hilltop

PHYSICAL

Landform	Undulating terrain	Upper slope	Lower slope	Floodplain	River	Lower slope	Upper slope and hilltop
Microtopography	Hummocky	Rocky + hummocky	Rocky	Hummocky		Flat and hummocks, deadfall	Hummocky
Drainage	Imperfectly to poorly drained	Well drained with seepage	Well drained with seepage	Well drained		Well drained	Well drained
Slope	0-5°	30-55°	20-45°	0-5°		10-35°	5-25°
Aspect	Northeast	Northeast	Northeast	North to east		Southwest	Southwest

BIOLOGICAL

Overstory	bF and dead bF	bF and dead bF	yB,bF,rM	sM,rM,yB,vF+wS,wB		wS+rM,wB,Be,dead bF	yB,sM,rM,Be,bF,wS
Understory	bF	bF+wB	bF,rM	bF,sM,rM,yB,Be,wS		wS,rM,wB,sM	Be,yB,sM,rM,wS
Regeneration	bF,wB	bF	yB,rM	sM,rM,bF		bF,wS,rM,wB,Be,sM	yB,Be,sM,wS
Groundcover	Twinflower, wood sorrel, Sphagnum moss	Lily-of-the-valley, mosses	Bunchberry, wood sorrel, wood fern, StM	Sarsaparilla, wood fern, spleenwort fern		Bunchberry, wild-lily-of-the-valley, Schreber's moss	Wood fern, sarsaparilla, StM, starflower
Overstory Condition	Young	Young	Mature	Immature to mature		Immature	Mature
Average Age	35-40 years	35-40 years	80-100+ years	50-100 years		50-60 years	80-100+ years

Landscape 72 (a) - Northern Cape Breton Taiga (MacKenzie River)
Landscape 72 (b) - Northern Cape Breton Taiga (North Barren)
Landscape 72 (c) - Northern Cape Breton Taiga (Mica Hill)

This highland landscape includes three sub-landscapes and is characterized by barrens and wetlands. Northern Cape Breton Taiga (MacKenzie River) is 1,960 hectares, Northern Cape Breton Taiga (North Barren) is 22,605 hectares and Norther Cape Breton Taiga (Mica Hill) is 5,629 hectares. Drainage is dendritic and is defined by many streams and scattered to locally common lakes.

Bedrock:

Major:	Proterozoic metamorphic volcanic and sedimentary rocks	65%
	Devono-Carboniferous to Hadrynian plutonic rocks	35%
Minor		

Surficial Materials:

Major:	Glacially scoured bedrock	55%
Minor:	Stony till	20%
	Residual	10%
	Organic	10%
	Other (silty till, alluvial, colluvial)	5%

Soils:

Major:	Rough mountain land (W)	100%
Minor:		

Hydrology:

Dendritic drainage; headwater streams of many small to medium sized rivers; small to medium sized lakes are scattered to common; one existing large lake is flowage.

Landforms:

Barrens; wetlands.

Coastal Environment:

N/A

Dominant Landscape Ecosystems:

Barrens
Wetlands

Landscape 73 - Ingonish Valleys

This 2,826 hectare lowland landscape is characterized by Acadian deciduous-dominated undulating terrain. Drainage is dendritic and is defined by the lower reaches of several small to medium sized rivers. The coast consists of several large bays bounded by low rock cliffs, beaches, headlands and several islands.

Bedrock:

Major:	Hadrynian granitoid rocks	75%
Minor:	Early Carboniferous sedimentary rocks, including carbonates	20%
	Other	5%

Surficial Materials:

Major:	Silty till plain	35%
	Stony till plain	30%
	Glaciofluvial	25%
Minor:	Glacially scoured bedrock	5%
	Alluvial	5%

Soils:

Major:	Gibraltar (W)	95%
Minor:	Rough mountain land (W)	5%

Hydrology:

Dendritic drainage; lower portions of several small to medium sized rivers draining into the Gulf of St. Lawrence; few small lakes.

Landforms:

Well drained undulating terrain.

Coastal Environment:

Several large bays bounded by gravel to sand beaches, rock and cliff headlands and several small to medium sized islands offshore.

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech (red spruce, eastern hemlock, white pine, red oak) undulating terrain with gap/patch natural disturbance regime.

Landscape 74 - Northern Cape Breton Atlantic Slope

This 14,114 hectare highland landscape is characterized by boreal coniferous undulating terrain. Drainage is dendritic and is defined by various middle to lower portion of small to medium sized rivers and few lakes. The coast is dominated by low to moderately high cliffs.

Bedrock:

Major:	Devonian-Hadrynian granitoid rocks	70%
	Proterozoic meta-volcanic and meta-sedimentary rocks (gneiss, schist, etc.)	25%
Minor:	Other	5%

Surficial Materials:

Major:	Glacially scoured bedrock	70%
Minor:	Stony till plain	20%
	Silty till plain	5%
	Colluvial	5%

Soils:

Major:	Rough mountain land (W)	100%

Hydrology:

Dendritic drainage; generally, middle to lower reaches of small to medium sized rivers draining into the Gulf of St. Lawrence; few small to medium sized lakes.

Landforms:

Well drained undulating terrain.

Coastal Environment:

Low to moderately high cliffed coast, generally <5-10 m high but up to 50+m locally; local coves and coarse sediment beaches; 2 small islands.

Dominant Landscape Ecosystems:

Well drained white spruce - black spruce - balsam fir - (white pine) undulating terrain with patch/infrequent stand initiating/frequent stand initiating natural disturbance regime.

Landscape 75 - Aspy River Valley

This 6,107 hectare lowland landscape is characterized by Acadian deciduous dominated undulating terrain. Drainage is parallel and defined by several small to medium sized rivers and few small lakes. The coast is dominated by several large harbours, which are bounded seaward by large barrier beaches.

Bedrock:

Major:	Early Carboniferous sedimentary rocks, including carbonates	80%
Minor:	Proterozoic gneiss and schist	15%
	Hadrynian granodiorite	5%

Surficial Materials:

Major:	Glaciofluvial	40%
Minor:	Silty till plain	20%
	Stony till plain	20%
	Glacially scoured bedrock	10%
	Alluvial	5%
	Marine	5%

Soils:

Major:	Gibraltar (W)	60%
	Hebert (R)	25%
Minor:	Rough mountain land (W)	15%

Hydrology:

Parallel, northeast flowing drainage; mid to lower, moderate to low gradient reaches of several small to medium sized rivers draining into Aspy Bay; few small lakes; several large harbours, bounded seaward by large barrier beaches.

Landforms:

Well drained undulating terrain.

Coastal Environment:

Extensive barrier sand beach complex and discontinuous, low rock and till cliffs; islands scattered in large harbours inside barrier beaches.

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech (red spruce, eastern hemlock, white pine, red oak) undulating terrain with gap/patch natural disturbance regime.

Landscape 76 - Aspy River Steep Slopes

This 8,208 hectare highland landscape is characterized by Acadian deciduous canyons and slopes. Drainage is dendritic and locally radial, and is defined by high gradient streams and small to moderate sized rivers. A coastal portion is dominated by moderate to high cliffs.

Bedrock:

Major:	Complete mix of Proterozoic meta-volcanic and meta-sedimentary rocks	80%
Minor:	Hadrynian and Carboniferous granitoid rocks	10%
	Early-late Carboniferous sedimentary rocks, including carbonates	5%

Surficial Materials:

Major:	Colluvial	80%
Minor:	Residuum	10%
	Glaciofluvial and alluvial	5%
	Glacially scoured bedrock	5%

Soils:

Major:	Rough mountain land (W)	100%
Minor:		

Hydrology:

Generally dendritic drainage with locally radial drainage; high gradient headwater streams or high gradient middle sections of small to moderate sized rivers are common; some direct drainage into the Gulf of St. Lawrence; no lakes.

Landforms:

Well drained canyons; well drained slopes.

Coastal Environment:

Moderate to high shoreline cliffs; 5-50+m; narrow shore, coarse sediment pocket beaches, no islands or harbours.

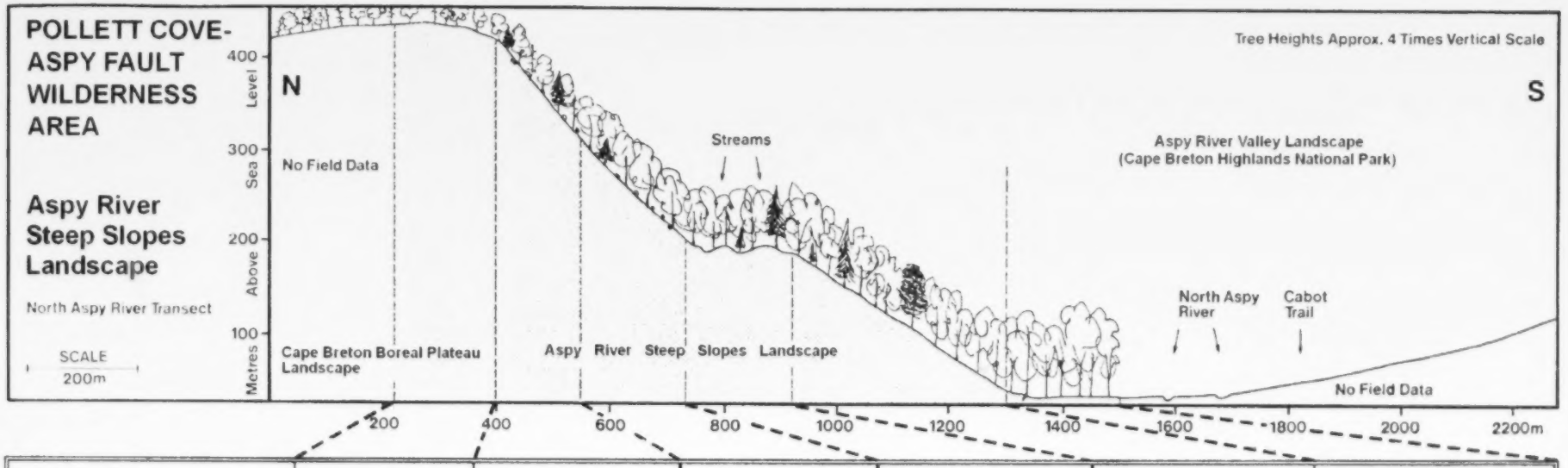
Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech canyons with gap natural disturbance regime;
Well drained sugar maple - yellow birch - American beech (red oak, white spruce, balsam fir) slopes with gap natural disturbance regime.

POLLETT COVE-ASPY FAULT WILDERNESS AREA

Aspy River Steep Slopes Landscape

North Aspy River Transect



ECOSYSTEM	Undulating coniferous terrain	Deciduous side slope				Deciduous floodplain
Ecosystem Section	Mixedwood terrain	Mixedwood upper slope	Deciduous mid slope	Deciduous stream valley	Deciduous lower slope	Deciduous floodplain

PHYSICAL

Landform	Undulating terrain	Upper slope	Mid slope	Stream valley	Lower slope	Floodplain
Microtopography	Flat with hummocks	Rocky	Rocky	Flat	Hummocky, rocky	Flat and hummocky
Drainage	Well to imperfectly drained	Well drained	Well drained	Well drained	Well drained	Well drained, local seepage
Slope	<5°	35-55°	30-50°	15-30°	25-45°	<5°
Aspect	Southeast	Southeast	Southeast	Southeast	Southeast	East

BIOLOGICAL

Overstory	wB,dead bF	yB+wB,bF,dead bF (patchy)	yB,wB,sM,bF and dead bF	sM+yB,eH	sM,yB,Be+rO,wS,eH	sM,wB,yB+wA,wS,bF,bP
Understory	wB,bF	yB	yB,bF	yB,Be+sM	sM,Be	sM,bF,wA+wS,yB
Regeneration	wB,bF	yB,wB+sM,rO	yB,bF,sM	yB,sM+rM,rO	Be,sM,yB,bF	sM,wA
Groundcover	Blackberry, wood fern, sarsaparilla, MtM	MtA,MtM, mosses, Canada yew	Wood fern, StM,Canada yew	New York fern, StM, sarsaparilla	Wood fern, starflower, StM	Wood fern
Overstory Condition	Young/decadent	Young to immature	Mature or older	Mature or older	Mature or older	Mature with scattered large sM,wB,bP
Average Age	<40 years	No data	No data	No data	No data	No data

Landscape 77 - Meat Cove Steep Ridges

This 7,655 hectare highland landscape is characterized by Acadian deciduous slopes and boreal coniferous ridges. Drainage is dendritic and is defined by a few small to medium sized rivers and locally scattered lakes. The coast is dominated by moderate to high cliffs.

Bedrock:

Major:	Early Carboniferous sedimentary rocks; may include local carbonates	90%
Minor:	Proterozoic gneiss and schist	5%
	Proterozoic plutonic (syenite & anorthosite) rocks; other rocks	5%

Surficial Materials:

Major:	Colluvial	60%.
Minor:	Residuum	20%
	Glacially scoured bedrock	10%
	Alluvial	5%
	Stony till plain	5%

Soils:

Major:	Rough mountain land (W)	100%
Minor		

Hydrology:

Dendritic drainage; middle to lower, high gradient portions of a few small to medium sized rivers, with drainage into Cabot Strait; scattered, small to medium sized lakes occur in southern and norther areas.

Landforms:

Well drained slopes; well drained ridges.

Coastal Environment:

Moderate to high cliffs, 5-75+m; narrow shore with coarse sediment pocket beaches; no islands and one small harbour.

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech slopes with gap natural disturbance regime;
Well drained balsam fir ridges with frequent stand initiating natural disturbance regime.

Landscape 78 - Polletts Cove Dissected Hills

This 2,155 hectare hills landscape is characterized Acadian deciduous dominated hills. Drainage is parallel off slopes and into the Gulf of St. Lawrence and is defined by various middle to lower portions of streams and small rivers. The coast is dominated by moderate to high cliffs.

Bedrock:

Major:	Early Carboniferous sedimentary rocks	95%
Minor:	Other	5%

Surficial Materials:

Major:	Colluvial	85%
Minor:	Glaciofluvial and alluvial	10%
	Residuum	5%

Soils:

Major:	Rough mountain land (W)	100%
Minor:		

Hydrology:

Generally parallel drainage with drainage off slopes and into the Gulf of St. Lawrence; various high gradient, middle to lower portions of streams and small rivers; no lakes.

Landforms:

Well drained hills.

Coastal Environment:

Moderate to high rock cliffs, 10-100 m or more, backed by steep slopes and hills; low coast locally at river mouths; narrow shore with coarse sediment pocket beaches; no islands and one small harbour.

Dominant Landscape Ecosystems:

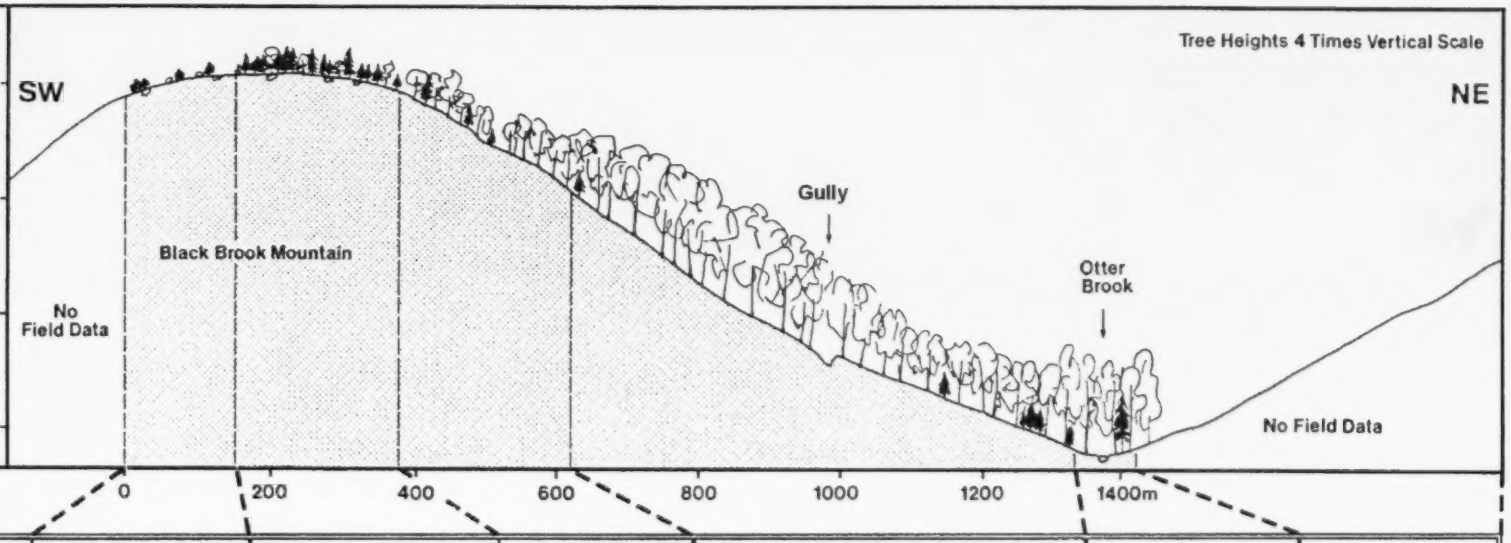
Well drained sugar maple - yellow birch - American beech (white spruce, balsam fir) hills with gap natural disturbance regime.

POLLETT COVE-ASPY FAULT WILDERNESS AREA

Pollett Cove Dissected Hills Landscape

Black Brook Mountain Transect

SCALE 200m



ECOSYSTEM	Well drained exposed coniferous ridges and hills		Well drained deciduous canyon			
Ecosystem Section	Barren hilltop	Coniferous hilltop	Deciduous upper slope	Deciduous middle to lower slope	Deciduous floodplain	Deciduous slope

PHYSICAL

Landform	Hilltop	Hilltop	Upper slope	Middle and lower slope	Floodplain	
Microtopography	Flat and rocky	Flat and rocky	Flat	Flat, some hummocks	Flat	
Drainage	Well drained	Well drained	Well drained	Well drained	Well drained	
Slope	<5°	0-20°	15-30°	15-30°	0-5°	
Aspect	Southwest	Northwest/southeast	Northeast	Northeast	Northeast	

BIOLOGICAL

Overstory	scattered and stunted wS,bF+wB	bF+wB,wS	wB,pC,MtA+bF,yB,sM	sM,yB,wB+rO,wA	sM,yB,wB,wS+aE,wA	
Understory	----	----	wB,bF,sM	sM,wB,bF,wS	yB,bF,wA,sM	
Regeneration	wB	bF	bF,rM,sM,wB	sM,yB,wB+wA,bF,rO	sM,yB,wA,aE	
Groundcover	Blueberry, cinquefoil	Bunchberry, sarsaparilla	Wood fern, bunchberry, StM,MtM	Wood fern, aster, Sarsaparilla, StM	Sweet cicily, violets, ostrich fern, grape fern	
Overstory Condition	0.8-1.5 m tall	Young	Mature	Mature to mature old growth	Mature	
Average Age	----	25 years	40-90 years	60-150+ years	70-100+ years	

Landscape 79 - Western Coast Steep Slopes

This 17,137 hectare highland landscape is characterized by Acadian deciduous dominated forest slopes and canyons. Drainage is dendritic and is defined by middle to lower reaches of many streams and small rivers. Coastal areas are dominated by resistant, high cliffs.

Bedrock:

Major:	Proterozoic meta-volcanic and meta-sedimentary rocks	75%
Minor:	Proterozoic/Cambrian plutonic (granitoid, syenite, etc.) rocks	15%
	Early Carboniferous sedimentary rocks	5%
	Devono-Carboniferous volcanic and sedimentary rocks	5%

Surficial Materials:

Major:	Colluvial	80%
Minor:	Glaciofluvial and alluvial	10%
	Silty and stony till plain	5%
	Glacially scoured bedrock	5%

Soils:

Major:	Rough mountain land (W)	100%
Minor:		

Hydrology:

Dendritic drainage; high gradient, middle to lower reaches of many small rivers and streams draining west into the Gulf of St. Lawrence; no lakes.

Landforms:

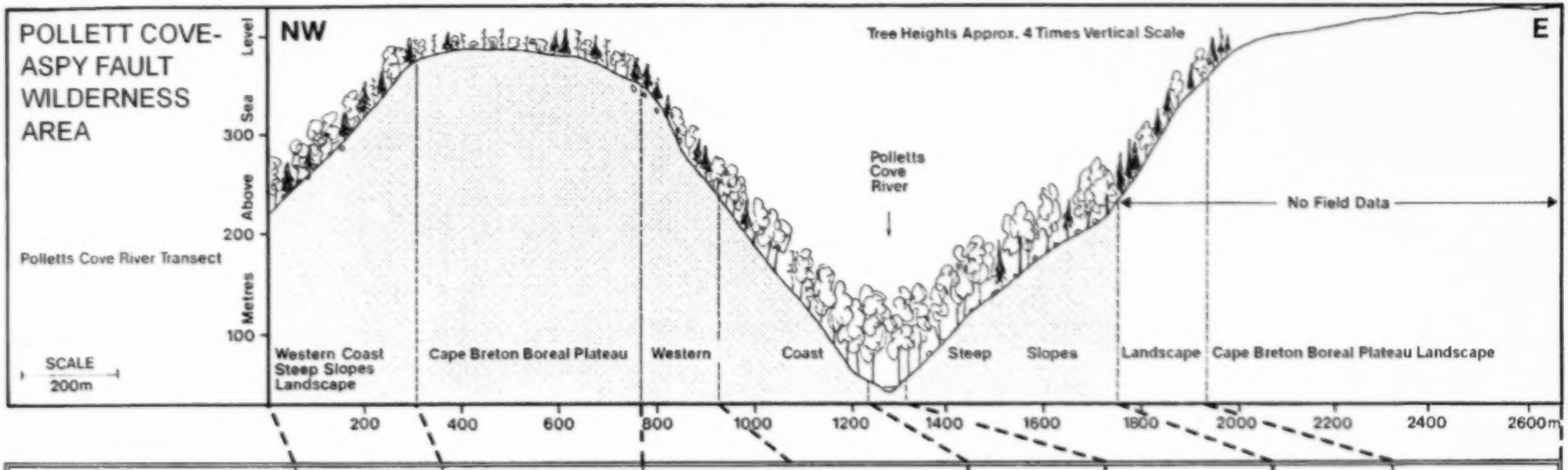
Well drained slopes; well drained canyons.

Coastal Environment:

Resistant, high cliffs, up to 300 m, back by steep slopes and hills; narrow shore with coarse sediment pocket beaches, no islands and few small coves.

Dominant Landscape Ecosystems:

Well drained sugar maple - yellow birch - American beech - white spruce - balsam fir slopes with gap/patch/frequent stand initiating natural disturbance regime;
Well drained sugar maple - yellow birch - American beech - white spruce - balsam fir canyons with gap/patch/frequent stand initiating natural disturbance regime.



ECOSYSTEM	Well drained deciduous steep sloped canyon	Well drained undulating coniferous terrain	Well drained deciduous steep sloped canyon					Well drained undulating coniferous terrain
Ecosystem Section	Mixedwood upper slope	Undulating coniferous terrain	Mixedwood upper slope	Deciduous lower slope	Deciduous floodplain	Deciduous lower slope	Mixedwood upper slope	Undulating coniferous terrain

PHYSICAL

Landform	Upper slope	Flats	Upper slope	Lower slope	Floodplain	Lower slope	Upper slope	Flats
Microtopography	Rocky	Flat to hummocky	Rocky	Hummocky, scattered rocks	Hummocky and flat	Rocky	Rocky with outcrop	No data
Drainage	Well drained	Well to imperfectly drained	Well drained	Well drained	Well drained	Well drained	Well drained	No data
Slope	35-55°	0-5°	30-45°	15-40°	0-5°	15-40°	45-75°	<5°
Aspect	Northwest	Northwest to northeast	East	East	Northeast/ southwest	West	West	West

BIOLOGICAL

Overstory	wB,wS,bF	bF and dead bF	bF+yB	yB,sM	sM,yB+bP,wA	sM,yB+bf,wA	No data	No data
Understory	wB,BF,MtA	bF,wB,MtA	bF	bF,sM,yB	sM	sM,bF	No data	No data
Regeneration	wB,bF,MtA	bF,wB,MtA+sM	bF	sM,yB+bF	sM,yB+wA,bP	sM,bF	No data	No data
Groundcover	Wood fern, MtM, StM, bunchberry	Wood fern, Blackberry, MtM	Wood fern, MtM, bunchberry	Wood fern, MtM	Wood fern, StM, Cow parsnip	Dewberry, wood aster	No data	No data
Overstory Condition	Mature	Young/decadent	Mature	Immature old growth	Immature old growth	Mature to immature old growth	No data	No data
Average Age	40-90 years	<40 years	50-90 years	100-150 years	100-150 years	80-120+ years	No data	No data

Landscape 80 - Sable Island Sandbar

This coastal landscape is a large sand bar characterized by rapidly evolving beaches and dunes. Fresh water is limited to several small to medium sized lakes whose boundaries change from year to year. The coast consists of exposed beaches.

Bedrock:

Major:	Tertiary bedrock deeply buried by unconsolidated sand	100%
Minor:		

Surficial Materials:

Major:	Marine deposits (sand)	100%
Minor:		

Soils:

Major: Restricted soil development; sand includes some organic matter derived from dune vegetation.

Minor:

Hydrology:

Streams or rivers absent; several small to medium sized lakes.

Landforms:

Beaches; sand dunes.

Coastal Environment:

Continuous, exposed beach, narrower and more steeply sloping on the more exposed north side of the island.

Dominant Landscape Ecosystems:

Beaches;
Sand dunes.

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Natural Landscapes of Nova Scotia

Current as of January, 2002

Landscape Numbers	Landscape Names
1	North Mountain Ridge
2	Annapolis Valley
3	South Mountain Foothills
4	St. Mary's Bay Cliffs and Beaches
5	Sissiboo Low Hills
6	Tusket River Drumlins
7	South Mountain Rolling Plain
8	Shelburne River Plain
9	Roseway River Glacial Plain
10	Tusket Islands
11	Shelburne Headlands
12	Sable River Basin
13	Lake Rossignol Hills
14	Mahone Bay Islands
15	LaHave Drumlins
16	Fisher Lake Drumlins
17	Minas Basin Headlands
18	Chignecto Slopes
19	Chignecto Ridged Plain
20	Cumberland Foothills
21	Tantramar Marshes
22	Northumberland Strait Plain
23	Cobequid Mountain
24	South Cobequid Foothills
25	Cobequid Tidal Bay
26	Central Rolling Hills
27	Walton River Clay Plain
28	Shubenacadie River Rolling Hills
29a	Interior Ridges (Rawdon Hills)
29b	Interior Ridges (Wittenburg Ridge)
30a	Central Quartzite Hills and Plains (Shubenacadie Lake)
30b	Central Quartzite Hills and Plains (Fish River)
31	Sackville Drumlins
32	Pennant Granite Barrens
33	Eastern Shore Beaches
34	Eastern Shore Granite Ridge
35	Eastern Shore Quartzite Plain
36a	Eastern Shore Drumlins (Tangier River)
36b	Eastern Shore Drumlins (Moser River)
37	Eastern Shore Islands
38	Guysborough Headlands
39	Canso Granite Barrens
40	Aspen Drumlin Plain

41	St. Mary's Plain
42	Pictou River Hills
43	McArras Brook Dissected Hills
44a	Pictou-Antigonish Hills (Pictou)
44b	Pictou-Antigonish Hills (Antigonish)
45	South River Low Hills
46	Mulgrave Hills
47	Isle Madame Coastal Plain
48	Bras d'Or Lake Plain
49	Bras d'Or North Mountain Ridge
50a	Bras d'Or Fault Ridges (Sporting Mountain)
50b	Bras d'Or Fault Ridges (East Bay Hills)
51	Forchu Till Cliffs and Beaches
52	Barren Hill Drumlins
53	Mira River Drumlin Plain
54	Mira River Hills and Ridges
55	Louisbourg Cliffs
56	Sydney Plain
57	Boisdale Hills
58	Skye River Hills and Valleys
59	Judique Plain and Hills
60	Mabou Hills
61a	Western Cape Breton Coastal Plain (Inverness)
61b	Western Cape Breton Coastal Plain (Cheticamp)
62	Masons Mountain
63	Keppoch Mountain
64a	Cape Breton Boreal Plateau (Gillanders Mountain)
64b	Cape Breton Boreal Plateau (Central)
64c	Cape Breton Boreal Plateau (Franey Mountain)
65	Margaree-Middle River Valleys
66	Dunvegan Fluted Hills
67	Squirrel Mountain Foothills
68	Interior Steep Slopes
69	Central Cape Breton Hills
70	Kellys Mountain
71	Eastern Coast Steep Slopes
72a	Northern Cape Breton Taiga (MacKenzie River)
72b	Northern Cape Breton Taiga (North Barren)
72c	Northern Cape Breton Taiga (Mica Hill)
73	Ingonish Valleys
74	Northern Cape Breton Atlantic Slope
75	Aspy River Valley
76	Aspy River Steep Slopes
77	Meat Cove Steep Ridges
78	Polletts Cove Dissected Hills
79	Western Coast Steep Slopes
80	Sable Island Sandbar

Natural Landscapes of Nova Scotia

Natural Landscapes of Nova Scotia

NOVA SCOTIA
Environment and Labour